The Sketch of Construction Grammar and Analysis on Its Superiorities and Inadequacies

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Abstract: For the new perspective of language research, the Theory of Construction Grammar breaks the traditional grammar analysis method, and studies the linguistic phenomena such as vocabulary, grammar, language and pragmatics as a whole. This paper starts with the sketch of the Construction Grammar, through the analysis of the basic viewpoints and characteristics of construction grammar, exploring the superiority and inadequacies of construction grammar, providing enlightenment for promoting the development of language research.

1. Introduction
In recent years, Construction Grammar has become a hot topic in the international linguistics world, and it is a more influential advanced theory. Recently, the discussion of Construction Grammar in the domestic linguistics community has become increasingly enthusiastic, and it has begun to enter the stage of tackling difficulties, which is extremely challenging.

2. Literature Review
Constructive Grammar Theory is a theoretical system based on the background of cognitive linguistics by scholars such as Fillmore and Goldberg, reflecting on TG grammar in the late 1980s. Goldberg (2006) argues that any language model can be viewed as a construction, as long as it has some force in its form or function and cannot be strictly predicted from its constituents or other existing constructs. In addition, although some language modes are completely predictable, they can be stored as a construct as long as they have a high frequency of occurrence. In this theory, the construction is seen as the basic unit of language and a form-matching body. Constructive grammar theory provides a new perspective for us to understand the nature of language.

So far, the construction grammar has four main branches: 1) Unification Construction Grammar represented by Fillmore, Kay et al. 2) Cognitive Grammar represented by Langacker 3) Radical Construction Grammar represented by Croft 4) Cognitive Construction Grammar represented by Goldberg. The four branches have their own research priorities, but all view the construction generated by the conventional pairing of form and function as the research key, so all can be referred to as Construction Grammar.

The domestic construction method mainly includes three aspects: firstly, it is a description and commentary on the theory; the second is the use of this theory to study Chinese construction; the third is the specific application of construction grammar theory. Domestic scholars first introduced the theory of construction grammar, and evaluated and reflected on it. Wang Hao (2001, 2011) discussed the characteristics of Construction Grammar. On the basis of comparison with Qiao's theory, he also expounded the core viewpoint and main content of Construction Grammar. Hou Guojin (2013) pointed out the eight weaknesses of construction grammar, such as unclear views, excessive grammar and semantic relevance, to arouse the attention and thinking of relevant scholars. Shi Chunhong (2015) has deepened the research on the phenomenon of construction suppression, and advocated the establishment of interactive construction grammar, which is considered to have...
greater value in interface research. Zhang Bojiang (1999.2000) studied the double-object construction and the word "put". It is believed that the order of the components of the construction, the distance and the like will affect the meaning of the whole structure. Zhang Jianli, Luo Rong: (2014) explored the escape configuration for the first time, explaining the supernormal phenomenon of semantic combination and the intensification effect reflected by language operation. Zhang Yuan (2015) analyzed the conceptual basis of the category transformation of the "form 1 + shape 2" construction grammar, and believed that the top-down analysis method provides a theoretical basis for the various grammatical expressions of the construction. It can be seen that domestic scholars are paying more and more attention to Chinese construction, but the research methods are relatively simple and the research scope is limited.

At the same time, domestic scholars also try to use construction grammar theory to guide teaching. Xu Weihua, Zhang Hui (2010) explored the enlightenment of construction grammar on second language teaching, and believed that all language phenomena should be given equal importance. Sultan Jie (2011) took the part-time experimental teaching as an example, and released the essence of the constructive block teaching method, which provided a new idea for Chinese teaching. Lin Zhengjun and Liu Yongbing (2012) discussed the content and methods of English grammar teaching from the perspective of Construction Grammar. It is suggested that teachers should pay attention to the contrast teaching of native language construction and target language construction, so as to prevent students from constructing the target language construction into the native language configuration. Throughout these studies, we can find that the teaching research based on construction grammar is still in the stage of enlightenment and model, and the research of empirical teaching is insufficient. However, it is undeniable that the construction grammar theory provides a new idea for teaching research, and it is worth exploring and exploring.

3. The sketch of the Theory of Construction Grammar

3.1 Defining Construction

Common sense suggests that linguistic knowledge consists of several different kinds of knowledge. In linguistics, this idea has given rise to what is called the dictionary-and-grammar model of linguistic knowledge (Taylor 2012), which makes a clear distinction between knowledge of vocabulary on the one hand and knowledge of grammar on the other. Construction Grammar is a theory that takes a radically different perspective: knowledge of language is to be modeled as knowledge of constructions and nothing else in addition. It’s generally adopted a definition of constructions under which they are form-meaning pairs which have either on- predictable formal characteristics, non-compositional meanings, or a high enough frequency to be remembered as such (Goldberg 2006: 5).

3.2 Identifying Construction

There are four strategies that allow you to identify constructions (Hilpert, 2006). The first strategy is to look out for structural traits of an expression that deviate from more canonical patterns. Second, constructions can be identified on the basis of non-compositional meanings. Third, idiosyncratic constraints that involve meaning or form serve as a powerful and flexible diagnostic. Fourth, even if the first three strategies fail to identify an expression as a construction, an analysis of collocational preferences may reveal that the expression in question does in fact have the status of a construction.

3.3 Argument structure constructions

Argument structure describes the number and character of elements that can bond to a given linguistic item, and is a term that pertains both to the meaning of the bonding elements and to the form of those elements. The former aspect was called the event structure; the latter was called syntactic argument structure. Construction Grammar argues the Argument structures are items of
linguistic knowledge that allow speakers to use verbs in syntactic contexts in which they are not conventionally used. Famous examples such as “John sneezed the foam off his cappuccino” illustrate this phenomenon. Argument structure constructions are syntactic constructions that can be filled by all manners of lexical material and that convey some meaning of their own that goes beyond the meaning of their component words. There are hence two main pieces of evidence for argument structure constructions: first, they allow non-conventional combinations of verbs and syntactic contexts; second, they convey non-compositional meanings. The combination of verbs and Argument structure constructions is not unconstrained: Goldberg’s semantic coherence principle states that a verb can only be combined with a construction if the participants that are evoked by the verb and the construction match semantically. There are hence limits on the possible combinations of verbs and constructions. The importance of Argument structure constructions to Construction Grammar at large was discussed in connection with the scene encoding hypothesis, that is, the idea that the basic syntactic patterns of a language encode recurrent event types that are basic to human experience.

3.4 Inside the Construct-i-con

Construction Grammar addressed the question whether the claim that constructions have meanings can in fact be maintained for all constructions, even highly abstract syntactic pattern such as the SUBJECT-PREDICATE construction or ellipsis constructions such as SHARED COMPLETION. Whereas researchers such as Goldberg (1995, 2006) maintain the idea of the Construction as a repository of meaningful forms, other proponents of Construction Grammar, notably Fillmore and colleagues (2012), allow meaningless constructions into Construction. They identify three types of construction for which semantic analyses are problematic. The first type is illustrated by the SUBJECT-PREDICATE construction or the MODIFIER-HEAD construction. These constructions represent highly general formal generalizations that contribute little in the way of meaning to the utterances in which they are found. A second type of construction, illustrated by the SUBJECT-AUXILIARY INVERSION or FILLER-GAP construction, conveys a heterogeneous range of different meanings, so that a common semantic generalization appears problematic. The third type covers ELLIPSIS constructions such as GAPPING, STRIPPING, and SHARED COMPLETION. These construction types specify particular syntactic patterns, but do not convey recognizable meanings and do not lead to coercion effects either. Construction Grammar discussed two strategies for the analysis of these constructions as form-meaning pairs. One strategy would look for an overarching, schematic meaning whereas the second would post a network of lower-level constructions, each of which would have meaning of its own.

3.5 Constructional morphology

Booij (2010, 2013) Morphological constructions were defined as form-meaning pairs that require an analysis of word-internal structures; it can be divided into several larger groups. One such group is represented by inflectional constructions such as the PLURAL construction, the PAST TENSE construction, or the S-GENITIV construction. There are still two morphological puzzles that receive a satisfactory explanation in a constructional analysis. The first phenomenon was the one of affix ordering in English. In response to the question why, for instance, the suffixes -ive and -ise can be combined in the verb relativize but not in a word such as generalize, one could propose a solution that groups affixes into different categories which can only combine in a fixed order. Since such a theory suffers from a number of theoretical and empirical problems, Hay and Plag (2003) propose a psycholinguistic ally motivated account that fits very well with the constructional view of linguistic knowledge: their proposal is that highly parable morphological constructions will have a greater tolerance towards complex words as bases. In a highly parable construction such as the ADJ-ness construction, speakers find it easy to distinguish the base adjective and the suffix -ess. Therefore, complex adjectives may also enter the construction to yield forms such as flirtatiousness.
Conversely, the ADJ-ity construction is not as transparent, so that flirtatiosity remains marginal for many speakers. As a second problematic phenomenon, Construction Grammar discussed minor compounding processes, namely compounds with plural non-heads (claims department) and ATTRIBUTIVE COMPOUND constructions (urban sociologist, which deviate both structurally and semantically from more general compounding constructions. In both cases, it was argued that low-level constructional schemas and subpart links in the construct-i-on were crucial instruments for the analysis of these phenomena.

3.6 Information packaging constructions

Speakers’ knowledge of English grammar includes knowledge of syntactic constructions that have the main purpose of managing information, packaging it in ways that facilitate processing by the hearer, and signaling that the speaker is aware of the current knowledge of hearer. A family of constructions that does just that is the family of English cleft constructions. Constructional Grammar distinguished IT-CLEFTS, WH-CLEFTS, and REVERSE WH-CLEFTS, discussing similarities and differences between these constructions. It was shown that IT-CLEFTS and WH-CLEFTS are similar with regard to pragmatic presupposition and pragmatic assertion, but that they differ, for instance, with regard to the issues of topicality and activation. The end weight principle was identified as another factor influencing the choice between cleft constructions. A second group of constructions discussed was that of the LEFT-DISLOCATION construction and the RIGHT-DISLOCATION construction, which were contrasted with superficially similar constructions. LEFT-DISLOCATION and TOPICALISATION share syntactic and prosodic features but differ with regard to topicality: the topic of the LEFT-DISLOCATION construction has a greater tendency to persist in the following discourse. RIGHT-DISLOCATION and NOMINAL EXTRAPOSITION differ with regard to their respective post clausal noun phrases. It is only in the NOMINAL EXTRAPOSITION construction that this constituent conveys focal information.

3.7 Constructions and language processing

There are three pieces of evidence for Construction Grammar from language production. First, Gahl and Garnsey (2004) got participants to read sentences with complement taking predicates such as “The director suggested the scene should be filmed at night”. One central finding of the study was that verbs were produced in a more reduced fashion if they were followed by a construction that typically co-occurs with them. Verbs such as argue or suggest are pronounced shorter when they are followed by a complement clause, and they are longer if they occur with a direct object. This result makes sense if linguistic knowledge is viewed as a repository of constructions that have associative links to lexical elements, whereas in the absence of that assumption it is hard to explain. Second, the assumption of constructions and their associations, Gris(2005) found that use of the INTRANSITIVE construction in corpus data increases the likelihood of that construction in the expression of a following dative event. However, this effect is neutralized when the following dative event involves verbs such as sell or band, which are strongly associated with the PREPOSITIONAL DATIVE construction. The lexical specificity of syntactic priming is problematic for accounts that aim to explain syntactic priming as a matter of form only, but the finding is fully expected on the constructional view. Third, knowledge of constructions explains how speakers complete sentence fragments. Gries et.al. (2005) asked experiment participants to complete fragments such as “The young philosopher was depicted”, and noted which of their stimuli were completed with the A5-PREDICATIVE construction. The results indicate that such continuations were especially likely if the main verb given in the stimulus was strongly associated with the construction.

Although there is a growing body of research that addresses language comprehension and language production from a constructional point of view, many of the findings still await further substantiation through studies that replicate and extend them. Also, the thematic focus of the
constructional psycholinguistic work that has been done so far is relatively narrow. Whereas quite a few studies address argument structure constructions, less work is done on morphological constructions or information structure constructions.

3.8 Constructions and language acquisition

Studies that track children's language production over time robustly find that children experiment very cautiously with language, and that if they do, the results tend to deviate from conventional adult usage. This result casts doubt on the assumption that children acquire syntactic rules that allow them to use language productively. The item-based strategies that very young children apply in the acquisition of pivot schemas seem to be continued into the processes of learning more abstract constructions, such as argument structure constructions and even complex clausal constructions. The evidence for the gradual strengthening of abstract constructions such as the TRANSITIVE construction, and it explained the skewed frequency hypothesis, which views the distributions of verbs in constructions as a design feature that boosts learnability. As to the questions that how children acquire complement clauses, relative clauses, and adverbial clauses, studies investigating these processes have found that the frequency of structures in the input is an important predictor of children's early proficiency with these structures, and it was also shown that children use adverbial clauses as independent utterances before they integrate them into complex sentential constructions.

4. The superiorities of Construction Grammar

Construction Grammar is an interdisciplinary study of linguistics, cognitive science, anthropology, philosophy and computer science, which makes the language structure fully described and explained. The superiorities of constructional grammar are as follows:

4.1 Providing supplement for Universal Grammar

Constructional Grammar takes the opposition to “generative ness" of language in Chomsky's linguistics -- Generative Grammar, and from the Query of Universal Grammar, it begins with the matching of form and semantics, i.e. the narrow construction. The new observations on lexical meaning, constructional meaning and argument structure involved in the study of construction grammar of four schools are sufficient supplements to the inadequate interpretation of Chomsky's linguistics.

4.2 Providing a good platform for grammaticalization research

Previous studies focused on formal grammatical parameters or on the relationship between semantic concepts and its transition, Hopper and Traugott (1993) define grammaticalization as “The construction develops grammatical functions in a certain context which, once grammaticalized, will continue to develop new grammatical functions. This process is grammaticalization." Thus, it is the form and function that are best described in a coherent manner (rather than the externality of language), which is best suited to linguistic change. Thus, Grammatical and Semantic changes can be described in the framework of construction. Wu Fuxiang (2005) points out that the common forms of grammaticalization are actually carried out in construction.

4.3 Beneficial to master the Second Language Acquisition

Construction grammar has a close relationship with SLA and makes a great contribution to it. Construction grammar concerns the pattern of concrete construction-meaning matching and the pattern of children's acquisition construction and its form-meaning matching. Yan-ping dong, Liang Junying (2002) points out that, because the mode of grammar does not involve the verification of all kinds of organization transformation, but based on the facts of experience and experiments, so it has more "psychological realism".
5. The Inadequacies of Construction Grammar

The construction grammar is based on a hypothetical description and interpretation of the language facts that have already existed, which is retroactive speculation. Therefore, there still exist the following inadequacies:

5.1 Disagreeable ideas among the various schools of thought

The construction grammar was first formed twenty years ago and has been gradually developed. Now it has formed the construction grammar theory and it contains four main schools: unification Construction Grammar represented by Fillmore, Kay et al.; Cognitive Grammar represented by Langacker; Radical Construction Grammar represented by Croft; Cognitive Construction Grammar represented by Goldberg. Although these four schools have their own research priorities, they all focus on the construction of the form of statute and function. However, some of their views are difficult to unify, which restricts the development of Construction Grammar and to make contributions on its linguistics.

5.1.1 Disagreement on Construction Definition

The definition of "construction" is not consistent throughout Goldberg herself research (1995, 2002a, b, 2003, 2006, 2007, 2009), etc. She once regarded each pairing of form and meaning as a construction, so, isn't language a list of different configurations of varying length and complexity (Lu Jiaming, 2008)? This is at odds with Goldberg's "Maximum Economy Principle" (1995:67-68) because the idea is that the number of different constructs should be minimized as much as possible. If morphemes and words are considered as constructions, the maximum number and even infinity of constructions will be found (Lu Jiaming, 2008). The confusion of understanding of "construction" in the study of construction grammar makes the related research not uniform and even self-justification hard. Moreover, the term "construction" includes all kinds of forms and knowledge of phonology, morphology and syntax, which will inevitably lead to doubts.

5.1.2 Different opinions on verbs

Bencini & Goldberg argues that predicates or verbs determine the argument structure. Croft believes that grammatical meaning such as verbs, nouns, subjects, predicates are determined by, that is, the sub-construction in which the related words and (small) constructions are located. Goldberg (1995) argues for a more eclectic approach to the role of reconfigurations. In her opinion, the verb plays an important role in Gestalt, but its function is not as good as that of the verb. However, many researchers, such as Bencini & Goldberg (2000), Goldberg (1995) and so on, believe that the internal rules between form and meaning of a sentence can not only be studied by the interaction of verbs and constructions, but also by the interaction of verbs and constructions. For interaction, Goldberg recommends using “fusion”. Boas (2008) does not oppose the idea of interaction, but finds it too superficial or simplistic.

5.1.3 Different opinions on which is more important between Construction meaning and Vocabulary meaning

The constructional meaning and the importance of lexical meaning are not uniform among the constructional experts. Lu Jiaming (2004a, b), which tends to mean that “the polysemy of words determines the diversity of sentences” is the opposite of Wang Li (2005). The Eclecticism of Zhang Shuo (2007a, b): Construction and Lexical Interaction, however, the word meaning is part of the constructional meaning. And it is impossible to interpret each "Constituent Meaning" with its own constructional meaning. Zhang Bojiang (2000) and Shen Jiaxuan (2000a; 2009: 71-81) believe that the constructional meaning is independent of the verb meaning, which is almost irrelevant to each other. Li Min (2006), Li Shujing (2001), Ren Longbo (2006) support the interactive views (between repression and counter-repression). Xu Shenghuan (2007b) holds that the construction is formed as a "big whole" as a verb meaning of "small whole".

The meaning of other words is not only the meaning of the verb, but also the meaning of other words, all related to construction. On the one hand, Construction Grammar holds that grammar is
the structure of the conceptual content of words and that semantics to a certain extent determines grammar” (Shi Yuzhi, 2004a). On the other hand, construction grammar emphasizes the determination, restriction or suppression of construction on semantics. These views contradict each other.

5.2 Ambiguous distinction between construction and non-construction

What is construction? Goldberg (1995:4) regarded construction as any form-meaning pairing (This includes the affixes such as anti-, dis-, -ing, ful, -less, -ly, and the simple words such as and, ok, it, sure, if etc.). In fact, most of the studies in the field of construction grammar have focused on the grammatical structures or sentence patterns that formed by two or more words, such as causative constructions, resultative construction, ditransitive construction, few of the study reached the morpheme field or the super sentence language level.

In addition, The Construction Grammar has defined “construction” as any pairs of form and meaning. This definition is not consistent with the notion of the same term in both cognitive grammar and other linguistic schools. The present analysis demonstrates that the definition is theoretically and practically meaning less, and thus has no effects on grammatical research.

5.3 Predictive problems

How predictable or unpredictable is the construction or type of construction? Since the construction is of different levels, their abstraction is not the same, and the unpredictability is not the same" (Yan Chensong, 2006). Besides, what is the “Predictive “construction? Note that the construction of any category (even a word) is somewhat unpredictable in one or more ways (almost arbitrary/arbitrary). If the unpredictable symbolic units of arbitrary meaning are used as construction, the construction library will expand indefinitely. This will “affect the simplicity and generalization of grammar analysis ”(Yan Cengsong, 2006)

How many configurations are there in a language? How is a library constructed? How is the configuration network built? What are the relationships between configurations? If Goldberg (2003) theory holds how to explain the relationship between them (Shi Yuzhi, 2007b). The different levels of language, from the text to the text, from the word, have their own characteristics. Can they be explained in a holographic way on a plane?

5.4 Overstress of the monostratality and independence of constructions

The constructional grammar is monostratality and seems designed to illustrate its independence and non-transformational or non-factional nature, but the hierarchy of constructions seems contradictory., the example “John faxed Mary a letter” has a subject-predicate construction, double object construction, past tense, finite construction((see article a/an) and derivative construction of the verb “fax+ed”. Obviously, from the perspective of the big picture, the example is the subject-predicate construction, under which there is a double-object construction, and then the following is the past tense construction, and finally the qualified construction and the derivation construction. If a statement is a construction, it is a large construction and the different components of the statement (if it can be decomposed) are a construction. There are symmetry and asymmetry, equality and inequality, priority and ambiguity in the relationship. Furthermore, a construction may inherit the characteristics of another construction, so the successor is a derivative/substructure and the recipient is a matriarchic configuration. Indeed, a construction is a parent configuration rather than a second construction, which is independent, autonomous, special, even though it is very similar to a second construction. But, as mentioned above, the construction has the division of mother-child construction and the difference of size construction, thus the construction has affinity and hierarchy relationship. So some constructions allow conversion, interpretation, and retelling and rewriting, the differences between them are relative.
5.5 Overstress of the openness of the grammar systems

If the grammar system is really as open as what Langacker said, then the new construction will be disordered and unpredictable, but the actual situation may not be the case: the new construction is always limited by various conditions. For example, the type of the new construction is "compatible with the grammatical characteristics of language" and the timing of its emergence is limited by the local "language state". The creation of new constructions often implies a chain reaction and all changes result from the adjustment of the internal construction of the grammatical system, this or that format of the non-communicator is fixed (Shi Yuzhi 2004).

5.6 Overstress of the relevance between grammar and semantics

The construction syntax such as Langacker confuses the semantic problem and grammar problem, as if all semantic problems are grammatical problems. Grammar and semantics are closely related, any grammatical markers or grammatical constructions have certain semantic functions, but the opposite is that any semantic problem is too much of a problem of grammar. The semantic "boundless" while grammar is a finite system, including "the finite structure type and the finiteness of grammatical markers. The semantic features associated with verb behavior are infinite in terms of verbs, but few of them are represented by grammatical devices.

6. Conclusion

Construction Grammar represents a new view of language and affords a tool of strong explanatory power for unaccounted linguistic, yet the theory is under development, which means that many issues still need to be work out.

References


