

A New Perspective on the Relation between Construction and its Slot Filler: Construction and Lexicon Interactive Coercion Model

Shi Yong

Foreign Language School, Nanjing Normal University, Nanjing
China

DOI: 10.6007/IJARBSS/v4-i12/1322 URL: <http://dx.doi.org/10.6007/IJARBSS/v4-i12/1322>

Abstract: The relation between schematic construction and its slot filler is a hot topic discussed by both philosophers and linguists worldwide. This topic involves not only the question of meaning in linguistic philosophy but also the relations of word meaning, sentence meaning and syntax meaning. This thesis is supportive of the concept of mutual definition between schematic construction and its slot filler proposed by Chinese philosopher Chen Jiaying, and the concept of interaction between two sides which has been widely accepted in linguistic community. As an instance of the interactive relationships between construction and lexicon, the Construction and Lexicon Interactive Coercion Model is proposed in the thesis, which can realize two commitments of cognitive linguistics: generalization commitment and cognitive commitment.

Key Words: Construction; slot filler; coercion; “*嘛*(ma)? ” Construction

1 Introduction

The notion of “coercion”, which used to be associated with Computational Linguistics, is now employed to study the semantic conflicts between syntax and lexicon of natural languages. The definition of coercion made by De Swart has been widely quoted nowadays. He asserts that coercion is syntactically and morphologically invisible: it is governed by implicit contextual reinterpretation mechanisms triggered by the need to resolve semantic conflict (Michaelis 2005). There are many notions or concepts that are naturally correspondent with the concept of coercion defined by De Swart. These notions are proposed by schools of Cognitive Linguistics and Transformational-Generative Grammar.

The notion of “*Control*” in the school of Transformational-Generative Grammar headed by Norm Chomsky refers to the constraint of one component upon another one. In addition, Jackendoff, a big figure in TG school, thinks that syntactic structure can produce “extra meaning”, which is named “Enriched Composition”. Wang (2009b) argues that the so called “Enriched Composition” is equivalent to “Coercion” or “Override or Overrule” proposed by Construction Grammarians. Jackendoff (1990 1997) and De Swart (1998) attempt to involve the interpolation of coercion operators in semantic structure (Michaelis 2002). This kind of coercion appears to indicate a modular grammatical architecture and provides strong support for a sign-based model of grammar (Michaelis 2004).

Talmy mentions “shift” phenomenon in his paper *The Relation of Grammar to Cognition* — a *Synopsis* in 1978, and this paper is modified, complemented and collected by a collection of essays edited by Rudzka-Östyn. Later, in his monumental work *Toward a Cognitive Semantics Volume I*, Talmy (2000) explicitly puts forward the concept of “Semantic Shift”, which is very similar to the term “Coercion” defined by De Swart.

Michaelis is a rising star in the school of Cognitive Linguistics. In her paper *Word Meaning, Sentence Meaning, and Syntactic Meaning (2003)*, she mentioned that many cognitive linguists, such as Goldberg, Lambrecht, Talmy, Langacker, Fillmore, Declerck have exerted strong influence on her research. Based upon criticizing and inheriting the coercion effect described by Jackendoff and De Swart, she proposes the famous “Override Principle” in 2002:

Override principle. If a lexical item is semantically incompatible with its syntactic context, the meaning of the lexical item conforms to the meaning of the structure in which it is embedded.

The combination of the concept of “Coercion” with the theories of Cognitive Linguistics will naturally yield many concepts of coercion. This paper focuses solely on the discussion of four concepts of coercion, namely, Michaelis’ exocentric coercion, Goldberg’s construction coercion, Panther & Thornburg’s lexical coercion and Taylor’s bondedness coercion.

2. Previous Studies on Four Types of Coercion Theories

2.1 Michaelis’ Endocentric and Exocentric Coercions

According to Michaelis (2005), semantic type-shifting is called coercion. She makes a division of endocentric coercion effect and exocentric coercion effect in accordance with the classification of Structuralism. According to Structuralism, “endocentric” means that the essence of the whole is determined by an element it contains, while “exocentric” means that the essence of the whole has nothing to do with the element it contains. But Michaelis’ dichotomy of endocentric and exocentric is slightly different. She (2002) points out that endocentric coercion is head-driven, while exocentric coercion is non-head-driven.

In endocentric coercion effect, the coercive operator is the head (eg.verb). As to the cause of endocentric coercion effect, Michaelis(2005) argues that endocentric type comes from the violation of selectional restrictions of a lexical head, eg., a verb.

(1) I drink red bull.

Sentence(1) indicates that NP(red bull) should, apparently, not be construed as an animal *red bull*. On the contrary, it must be interpreted as a world famous beverage brand, the house-hold name, *Red Bull*. In endocentric coercion effect, the relevant semantic effect accepted by argument is attributed to the imposition of the lexical head. Therefore, Michaelis regards this type of coercion as an extension of “Lexical Licencing”.

Contrary to endocentric coercion effect, exocentric coercion effect completely abandons such a syntactical concept that the sentence is motivated by the projection of the lexical head. The coercive operator can be a single word, but not necessarily the lexical head. The coercive mechanism goes like this: the coercive operator imposes some semantic restriction on the linguistic element collocated with it. For example:

(2) I had a beer.

In sentence (2), there is a semantic conflict between determiner *a* and mass noun *beer* in that the infinite article can not modify mass noun according to the standard of English grammar. In such a case, infinite article *a* plays the function of coercive operator, while *beer* acts as the coerced element, whose meaning is interpreted, or to be exactly, distorted to mean the bottled beer instead of the draft beer. It is only through such a mechanism that this sentence is syntactically accommodated. In this process, the CxG model retains the insight that nouns are the syntactic heads of NPs while also capturing the mutual licensing relationship that holds between noun and determiner in the NP (Michaelis 2005). This is the most prominent feature of Michaelis' construction grammar.

2.2 Goldberg's Construction Coercion

According to Goldberg (1995), coercion is not a purely pragmatic process; rather, it is only licensed by particular constructions in the language. That is, coercion is only possible when a construction requires a particular interpretation that is not independently coded by particular lexical items. If there is a conflict or inappropriateness between constructional meaning and the meaning of its filled lexical item, one part should alter to suit the requirement or the licensing of the other one. As to this point, Goldberg asserts that the occurring lexical items can be coerced by the construction into having a different but related interpretation, the entire expression will be judged grammatical. In the process of coercion, the lexical meaning serves as the coerced element: its meaning should be adjustable to the accommodation of the constructional meaning. For example:

(3) Sam squeezed the rubber ball inside the jar.

In this sentence, the prototypical meaning of locative preposition *inside* is inappropriate with the directional meaning of Caused-Motion Construction. Thus this semantic conflict can be resolved by metonymically constructional coercion that enables the location encoded by locative preposition *inside* to be interpreted to be the endpoint of a path to that location.

2.3 Panther & Thornburg's Lexical Coercion

An unidirectional coercion comes into existence by means of such a pure constructional coercion as Goldberg's construction coercion, in other words, semantic licensor resides merely in construction, while the filled lexical items are subject to licensing and coercion of their targeted construction. In fact, Panther & Thornburg (2004) have pointed out the limitation of this unidirectional coercion and assumed the possibility of lexical coercion parallel to Goldberg's construction coercion:

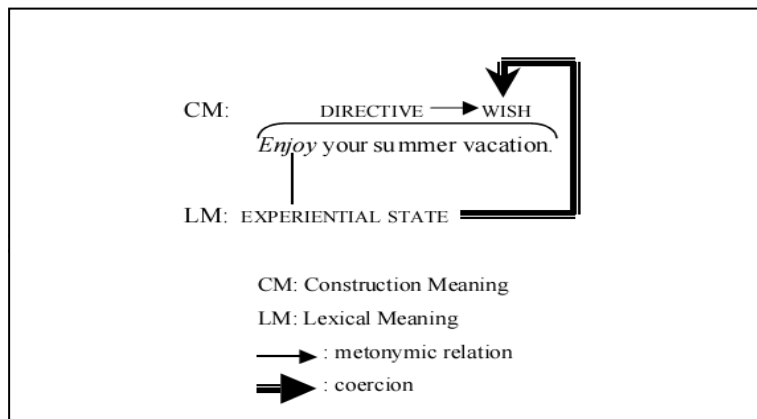
It is not impossible to imagine that lexical meaning might also "nibble at" constructional meaning and change it metonymically.

For example:

(4) Enjoy your summer vacation!

The constructional meaning of imperative sentence emphasizes action, that is to say, "to do something to the effect so that you enjoy your summer vacation." However, *enjoy* indicates

a state that one experiences spontaneously. The semantic conflict manifests itself in the contradiction that one emphasizes an action, the other indicates a state. This conflict can be removed by altering the constructional meaning. In fact, imperative sentence can not only indicate a kind of dynamic force, but also express wish and hope, that is, an optative attitude is extended through some kind of dynamic force. The latter interpretation is compatible with the mental state meaning of *enjoy*. Therefore, it can be concluded that under the coercion of the lexical meaning of *enjoy*, the dynamic or forcible side of the constructional meaning of imperative sentence is coerced and hidden and this imperative mark is coerced into an optative interpretation by means of lexically coerced metonymy, as is shown in Figure 2.1 below:



when it combines with another unit, change its specification.

Different from other coercion theories, Taylor’s concept of coercion can occur at both semantic and phonological levels

- (5) a. I drop a book.
- b. I translate a book.

The above two sentences demonstrate the coercion at semantic level. In sentence(a), the meaning of *drop* coerces the material-object reading of *book*, while in sentence(b), the meaning of *translate* coerces the interpretation of *book* as a linguistic text instead of a real object.

The coercion at phonological level can be best specified in the relation between stem or root and affix. Often, the bound morpheme coerces the phonological shape of the stem. (Taylor 2002). For instance, the suffix -ic[ik] is profiled because it offers the semantic value of adj. to the root. This fact is echoed by coercion: the suffix -ic[ik] coerces the phonological shape of its root, as a result, the accent mark of atom ['ætəm] is shifted to the place closer to the profiled morpheme -ic[ik]: atomic[ə'tɪmɪk], instead of ['ætəmɪk]. The stem can coerce affix as well. For example, prefix un- is altered in accordance with the phonological shape of the stem it is bound to.

3. Theoretical Basis: Construction and Lexicon Interactive Coercion Model

3.1 Introduction

Four types of coercion concepts, namely, Michaelis’ exocentric and endocentric coercions, Goldberg’s construction coercion, Panther & Thornburg’s lexical coercion and Taylor’s bondedness coercion are proposed from four different perspectives with four different

purposes. Specifically, Michaelis' dichotomy of exocentric and endocentric coercions takes over the classification of Structuralism; Goldberg's construction coercion is proposed for the purpose of justifying her construction grammar approach to argument structure; Panther & Thornburg's lexical coercion is hypothesized for the sake of emphasizing the role of conceptual metonymy in meaning construction; Taylor's bondedness coercion is put forward from the perspective of collocation co-occurrence. The Construction and Lexicon Interactive Coercion Model based upon the interaction between schematic construction and its slot filler proposed in this chapter can fundamentally cover four types of coercion theories.

3.2 Reflection upon Four Types of Coercion Theories

3.2.1 Extension of Michaelis' Exocentric Coercion

Michaelis' exocentric coercion effect presents a significant challenge to theories of sentence semantics based upon the projection properties of lexical words (Michaelis 2004). It undermines the validity of lexical-head-projection driven syntax. Based upon this concept, many Chinese cognitive linguists argue that exocentric coercion effect can be extended, developed and compensated by Construction Grammar: The internal structure of a grammatical construction can also re-categorize a lexical item so as to produce the usage of metonymy (Zhang 2007). Wang(2009a) has appealed to construction as an implementor of exocentric coercion effect. Michaelis (2002) raises construction-based model of coercion in an attempt to unify endocentric (head-driven) coercion effect and exocentric(non-head-driven) by treating them both as instances of syntactically based composition. Furthermore, Michaelis (2003) uses the phenomenon of implicit type-shifting to demonstrate that constructions have meanings distinct from those of words and that, in cases of conflict, construction meaning overrides word meaning. She argues that the override is predictable by-product of the general mechanism of construction-word integration. This mechanism is described with respect to three kinds of constructions, namely, argument-structure constructions, aspectual constructions and sentence types. On the basis of these three case studies, she concludes that appeal to constructional meaning greatly enhances the descriptive power of a theory of sentence semantics (Michaelis 2003). In 2004, she further states that a single combinatory mechanism, the construction, is responsible for both coerced and compositional meanings. Although she (2002) asserts that she employs a version of the CG architecture in accordance with Goldberg, her coercion theory is, actually, taking morph-syntactic rules as its point of departure, that is to say, coercion is a sheer syntactic processing, aiming to meet the requirement of grammatical rules regardless of subjective construal of human being.

3.2.2 Complementation of Goldberg's Construction Coercion

Goldberg's construction coercion is an accommodation of semantic conflict. In her model, the coercive operator is invariably the constructional meaning, while the coerced item is the filled lexical item of the (schematic) construction. Goldberg (1995) argues that constructions themselves carry meaning, independently of the words in the sentence. That is to say, constructional meaning plays a predominant role, while the insertion of lexical items into (schematic) construction must be constrained by constructional meaning. The relationship between (schematic) construction and its slot filler can be described by a vivid metaphor: Constructional meaning is a mould, and the materials put into the mould are varied in quality, yet the shape of the final products should be the same. This is really a strong opinion ! Furthermore, Goldberg's construction coercion narrows itself down to the

accommodation of semantic conflict only, while giving an undramatic expression to a situation when the meaning of two sides is in accord. This unidirectional construction coercion is deficient in the interactive relation of both sides, therefore, it should be complemented.

3.2.3 Can Panther & Thornburg's Lexical Coercion Work Independently?

In response to Goldberg's construction coercion, Panther & Thornburg(2004) describes it as an "unidirectionality of the coercion process":

One might be tempted to think that metonymic coercion always goes from grammatical meaning to lexical meaning. It would be nice if one could establish such unidirectionality of the coercion process. The notion of unidirectionality seems to underlie construction grammar, where it is assumed that constructions have meaning and that lexical items that are inserted in a construction do not necessarily have to fit "perfectly" but can under certain circumstances, be coerced into a meaning determined by the construction meaning.

In order to prove the argument that "Metonymies are ubiquitous as conceptual tools in natural language", Panther & Thornburg put forward lexical coercion, or to be exactly, they hypothesize the notion of lexically coerced metonymies in an attempt to justify the generalization of conceptual metonymy in meaning constructions, which, fortunately, complements the unidirectionality of Goldberg's construction coercion and realizes the interaction between construction meaning and lexical meaning. In China, Wang(2009) summarizes eight kinds of lexical coercion phenomena and explains the motivation of "Adverb-Noun Construction" by means of lexical coercion, which make a great contribution to the interactive coercion between construction and lexicon.

However, lexical coercion can be easily challenged by Goldberg's "polysemy of construction", which argues that the insertion of lexical item into construction is due to the polysemy of construction instead of lexical coercion, but this viewpoint has the disadvantage of proliferating polysemy in construction meanings (Panther & Thornburg 2004). By and large, lexical coercion can not work independently from construction coercion. They are two sides of the coin.

3.2.4 Development of Taylor's Bondedness Coercion

Taylor's concept of coercion is called bondedness coercion largely because of his remark in *Cognitive Grammar* "With coercion comes bondedness." (Taylor 2002), and he accepts this name in his e-mail reply. Coercion produces bondedness, which, in turn, causes fuzzy boundaries between components in the construction, as a result, the components lose their identities and the construction as a whole, which acquires a completely brand new meaning with a highly cohesive, well-organized structure, is unanalysable if it is reduced to some smaller segments. Taylor argues that there is a parameter between coerciveness and bondedness, in other words, the parameter between coerciveness and bondedness is closely associated with the degree that the coerced side alters under the coercion of its neighbours. Taylor's concept of coerciveness is perfect enough to explain the bondedness between a unit and its neighbour at both semantic and phonological levels, but it has the disadvantage of confining coercion to the perspective of collocation co-occurrence without consideration of the relation between construction and lexical items.

3.3 Theoretical Integration: Construction and Lexicon Interactive Coercion Model

3.3.1 Motivation of Interactive Coercion Model

As is suggested, four types of coercion theories are proposed from four different perspective with four different purposes. Michaelis' exocentric coercion is proposed to challenge the projection properties of lexical words or lexical licencing, and her dichotomy of exocentric and endocentric coercion effects borrows idea from two terms of Structuralism: exocentric and endocentric. Although she brings forward *Overriding Principle* under the influence of many cognitive linguists which is very similar to Goldberg's construction coercion, she asserts that coercion phenomena actually provide strong support for a sign-based model of grammar (Michaelis 2004), which indicates that her concept of coercion is inherently lacking in cognitive commitment. But her idea can be inherited, developed and enhanced by cognitive linguistics. Goldberg's construction coercion focuses solely on the accommodation of semantic conflicts between a construction and its filled lexical items, and she over-emphasizes the roles played by construction while neglecting the function of its filled lexical items. Her unidirectional coercion model was compensated by Panther & Thornburg, who first propose the possibility of lexical coercion. But lexical coercion is originally hypothesized for the sake of emphasizing the role of conceptual metonymy in meaning construction. John Taylor's concept of coerciveness is perfect enough to explain the bondedness between a unit and its neighbour at both semantic and phonological levels. From the examples he raises in his monumental work *Cognitive Grammar*, his bondedness coercion is grounded by the concept of collocation co-occurrence. Our point of departure is that coercion is ubiquitous and necessary when it comes to the combination not only of neighbourly linguistic subparts, but also of schematic construction and its slot fillers.

After assimilating and criticizing the advantages and disadvantages of aforementioned four types of coercion concept, we propose the Construction and Lexicon Interactive Coercion Model. Hopefully, our hypothesis can fundamentally cover four types of coercion concepts.

3.3.2 Research Domain of Interactive Coercion Model

Goldberg (2006) gives the latest definition of construction:

All levels of grammatical analysis involve constructions: learned pairings of form with semantic or discourse function, including morphemes or words, idioms, partially lexically filled and fully general phrasal patterns.

This definition indicates that the combination of linguistic units is, actually, the integration of one construction with another one. This process of combination is a bit too general! Our thesis focuses exclusively on the integration of a schematic or abstract holistic construction and its filled lexical items or slot filler, the result of which yields more concrete constructs as instances of constructional schema.

As to the relation between sentence and word, Chinese linguistic philosopher Chen Jiaying(2003) has issued the following statement:

Sentence and word are mutually defined, and it is of no significance to identify which is earlier and which is later. This is not a nonsense game like chick-and-egg puzzle, instead, it involves the most important concept of meaning in linguistic philosophy, and how to make a distinction between word meaning and sentence meaning.

The relation between a schematic construction and its slot filler concerned in this thesis belongs to a wider range of relation between sentence and word in Chen's statement. As to the relation of construction and slot filler, Bertrand Russell recognizes that sentence meaning is more than the sum of word meaning, but he is sorry to accept that the additional meaning is unanalyzable (Chen 2003). Many cognitive linguists refer this relation as interactive relation, such as Langacker's elaboration-site theory, Talmy's classification of implicit and explicit conversion, Michaelis' dichotomy of elaboration and conversion. In China, Sun(2008) focuses on the interactive relation between construction meaning and lexical meaning in his doctoral dissertation. Wang(2009b) summarizes the interactive relationships between construction and its filled lexical item from the perspective of role interaction and meaning interaction.

3.3.3 Mechanism of Interactive Coercion Model

Based upon above discussions, the concept of interactive coercion is proposed in combination of the concept of interaction and the integration of construction coercion and lexical coercion. As an instance of the interactive relationships between construction and its slot filler, interactive coercion intends to extend the conventional concept of coercion, and develop the advantages of aforementioned four concepts of coercion.

If and only if schematic construction and its slot filler are consistent with each other, their meaning will be strengthened and diversified through interactive coercion from both sides. This process is called strength-oriented interactive coercion, which is realized by bondedness interactive coercion.

If and only if schematic construction and its slot filler are inconsistent with each other in terms of syntax, semantics or pragmatics, interactive coercion from both sides will be activated to eliminate the inconsistency and contradiction. This process is called accommodation-oriented interactive coercion, which is realized by construction coercion and lexical coercion.

According to Construction and Lexicon Interactive Coercion Model, on the one hand, construction meaning serves as a coercive operator that coerces its slot filler into semantic change, or semantic conversion. Through this process, construal meaning of lexical items is formed, which is in harmony with specific context in which it embeds. Construal meaning of lexical items is signified by "lexical meaning+", which includes the polysemy of the lexical item, the new meaning it gains in certain context, and the meaning which the dictionaries fail to cover. On the other hand, lexical items can also serve as a coercive operator to exerts impact on construction meaning. Consequently, strength-oriented interactive coercion constructs and accommodation-oriented interactive coercion constructs are produced with semantic smoothness, syntactic compatibleness and pragmatic appropriateness. These two coercive processes occur concurrently and homogeneously. Through these processes, some aspects of semantic features of construction and its slot filler are profiled or de-profiled or hidden so as to realize mutual coercion and mutual perfection. The interactive coercion construct is perfectly consistent with lexical meaning+.

The interactive coercion model is semantic-centered. It is a sub-part of human cognitive process, functioning as a processor in case of combination between schematic construction and its slot filler. The model has the following explanatory features:

First, coercion is inherently a subjective linguistic processing mechanism. The motivation of coercion is to satisfy the needs of the abidance by the subjective construal of the listeners and readers. In terms of coercive effect, both strengthened effect and accommodated effect

can yield diversification of constructs and suit the needs of construal and communication in terms of semantics and pragmatics. Man's use and construal of language rely largely upon conceptual processing mechanisms and semantic frame or domain motivated by certain portion of language in his mind. As to this point, John Taylor(1986) has the following statement:

We can regard the relevant background information for the characterization of word meanings as a network of shared, conventionalized, and to some extent perhaps idealized knowledge, embedded in a pattern of cultural beliefs and practices.

Second, coercion process is two-way directional. It emphasizes the interactive relationship between construction coercion and lexical coercion. In fact, the process of "big coerces small" must accompany the process of "small impacts big", the two are inseparable. As a result, schematic construction obtains various interactive coercion constructs after the insertion of lexical items, meanwhile, lexical items are endowed with extended meaning or, in many cases, a completely new meaning.

Third, when it comes to the combination of Lexical Item I and Lexical Item II, or Construction I and Construction II, or construction and its slot filler, the Principle of Compositionality will come into effect to certain degree if such humanized factors as human use and construal are completely subtracted from consideration. On the contrary, if these humanized factors are brought into consideration, the interactive relationship between two parties is unavoidable, and the Principle of Integration advocated by Cognitive Linguistics will naturally prevail over Frege's Principle. This deduction can very well defend the legitimacy of several statements, such as Cuyckens' remark(2001):

Polysemy, the association of two or more related senses with a single linguistic form, is ubiquitous in natural language and therefore deserves linguists' attention.

John Taylor's extreme and courageous remark in his monumental work *Cognitive Grammar*:

Strict compositionality is rare, if ever, encountered. Most expressions (I am tempted to say: all expressions), when interpreted in the context in which they are uttered, are non-compositional to some degree.

Croft & Cruse's comment on Principle of Compositionality:

For certain aspects of meaning, at certain levels of construal, classical compositionality holds, but not for all aspects or levels

From the above statement, we conclude that an absolute compositional construct is just a theoretical possibility owing to the addition of humanized factors in the linguistic processing mechanism.

4 Case Study

“为什么(wei shen mo) (why)” is a typical interrogative pronoun appearing in constituent interrogative sentence. According to Construction and Lexicon Interactive Coercion Model, the combination of Interrogative Question Construction and final modal particle “嘛(ma)” will naturally cause the interactive coercion of two sides, which is of two ways: firstly, the interrogative pronoun are subject to interrogative functional decay by means of lexical coercion of “嘛(ma)”, which yields weak interrogative sentence (6b), meanwhile, “嘛(ma)” picks up its interrogative function again under the coercion of Interrogative Construction, which yields strong interrogative sentence (6c).

(6) a. 你们为什么这么凶? 为什么要生我的气?

Ni men wei shen mo zhe mo xiong? Wei shen mo yao sheng wo de qi?

Why are you so fierce? Why are you angry with me?

b. 你们为什么这么凶嘛? 为什么要生我的气嘛?

Ni men wei shen mo zhe mo xiong ma? Wei shen mo yao sheng wo de qi ma?

(From *Green Grass By the River* by Qiong YAO)

c. 宁二子倒抽了一口冷气, 问: “为什么? 为什么嘛? 哥, 说呀!”

Ning wen: “Wei shen mo? Wei shen mo ma? Ge, shuo ya!”

Ning asks, “Why? Why ma? Brother, please answer!”

(From *To Defend Yanan* by Du)

Sentence (6a) is a strong interrogative sentence, which indicates that the question points are unknown or unfamiliar to the speaker, who requires reply seriously. With the insertion of “嘛”(ma), sentence (6b) remains an interrogative syntactically, whose interrogative information is represented by interrogative pronoun “为什么(why)” and interrogative intonation. However, “嘛”(ma) exerts semantic coercion on the interrogative construction to the extent that the interrogative intensity of “为什么”(why) is weakened and the sentence becomes a weak interrogation, in other words, the speaker has a fair understanding of the interrogative information(Li, 2002), so his/her real purpose is to convey an attitude toward the proposition instead of eliciting an answer. Pragmatically speaking, the sentence displays the speaker's complaint and discontent to “you” in the context. “嘛”(ma) is an ostensive function marker, through which the listener will understand the speaker's purpose with minimum effort, therefore, under the coercion of “嘛”(ma), the listener is seesawing between answer and refusal of answer. Lexical coercion processing embodies metonymy: feature for category. The specifications and functions of interrogative construction go through a transformation, that is, interrogative function decay, under the coercion of “嘛”(ma), as a result, weak interrogative construct substitutes the whole category of interrogative construction.

Sentence (6c) retains question information and exhibits interrogative function of “嘛”(ma). Through construction coercion of interrogative construction, “嘛”(ma) retrieves its interrogative function, at the same time, interrogative pronoun “为什么”(why) is foregrounded, and the whole sentence appears strong interrogative.

5 Conclusion

Out of necessity of man's use and construal, coercion is ubiquitous in the integration of schematic construction and its slot filler. This thesis conducts a comprehensive analysis of the point of departure, advantages and disadvantages of Michaelis' exocentric and endocentric coercions, Goldberg's construction coercion, Panther & Thornburg's lexical coercion and Taylor's bondedness coercion, based upon which, Construction and Lexicon Interactive Coercion Model is proposed and applied to the interpretation of "X嘛(ma)?" Construction. This thesis argues that the interactive relation between interrogative construction with its interrogative marker "为什么(why)" and its slot filler final modal particle "嘛(ma)" contributes to the interactive coercion of both sides, which promotes the diversity and variety of the sentence pattern in terms of syntax, semantics and pragmatics.

Acknowledgement

My great gratitude for my doctoral advisor, prof. Liu Yuhong for his help in conducting this paper.

Corresponding Author

Name: Shi Yong

Affiliation: Foreign Language School, Nanjing Normal University, Nanjing

Country:China

Email: 1070206406@qq.com

Complete address: No. 600 Xia Men Road, Wanzhou District, Chongqing City, China

Post code 404001

Cellphone:15380403940

Telephone:023-58135581

Address (Chinese Version): 中国 重庆市万州区厦门路600号重庆三峡农业研究院

邮编 : 404001 电话15380403940

Name(Chinese)石勇

References

Chen Jiaying, (2003). *Linguistic Philosophy*. Beijing: Beijing University Press.

Goldberg, A. E. (1995). *Constructions: A construction grammar approach to argument structure*.

Chicago and London: University of Chicago Press.

Goldberg, A. E. (2006). *Constructions at work: The nature of generalization in language*. Oxford:

Oxford University Press.

Langacker, R. W. (1987). *Foundations of cognitive grammar. Vol. I: Theoretical prerequisites*.

Stanford, California: Stanford University Press.

Li. (2002). *Record of Grammar Study*. Beijing: Beijing University Press.

- Michaelis, L. A. (2002). Headless constructions and coercion by construction. In Elaine J. Francis & Laura A. Michaelis (Eds.). *Mismatch: Form-function incongruity and the architecture of grammar*. Stanford: CSLI Publications.
- Michaelis, L. A. (2003). Word meaning, sentence meaning, and syntactic meaning. In Cuyckens, Hubert, Rene Dirven & John Taylor (Eds.). *Cognitive approaches to lexical semantics. (Cognitive Linguistics Research 23)*. Berlin: Mouton de Gruyter.
- Michaelis, L. A. (2004). Type shifting in construction grammar: An integrated approach to aspectual coercion. *Cognitive Linguistics*, (2), 1-61.
- Michaelis, L. A. (2005). Entity and event coercion in a symbolic theory of syntax. In J. Ostman & Fried, M. (Eds.). *Construction grammar: Cognitive grounding and theoretical extension* (Pp. 45-87). Amsterdam & Philadelphia: John Benjamins Publishing Company.
- Panther, Klaus-Uwe. & Thornburg, L, L. (2005). The role of conceptual metonymy in meaning construction. In Ruiz deMendoza Iba ez, Francisco, J., & Sandra, Pe, a Cerve, I. (Eds.). *Cognitive Linguistics: Internal dynamics and interdisciplinary interaction. (Cognitive Linguistics Research 32)*. Berlin & NewYork: Mouton deGruyter.
- Talmy, L. (2000). *Toward a cognitive semantics*. Cambridge: The Massachusetts Institute of Technology Press.
- Taylor, J. R. (1989). *Linguistic categorization third edition*. Oxford: Oxford University Press.
- Taylor, J. R. (2002). *Cognitive grammar*. Oxford: Oxford University Press.
- Taylor, J. R. (2007). *Ten lectures on applied cognitive linguistics by John Taylor*. Beijing: Foreign Language Teaching and Research Press.
- Wang. (2009a). Construction Grammar Approach to Chinese “adverb+noun” Construction. *Foreign Language and Literature*, (4), 1-8.
- Wang. (2009b). Construction Coercion, Lexical Coercion and Inertia Coercion. *Foreign Language and Foreign Language Teaching*, (12), 7-15.