A Radical Construction Grammar analysis of Mandarin Chinese SOV sentences

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ABSTRACT

This paper discusses, from a Radical Construction Grammar perspective (Croft 2001), simple Mandarin Chinese SOV sentences, using terminology developed by Mel'čuk (2001) to account for the Semantic-Communicative Structure of sentences. It is argued here, contrary to what is traditionally thought, that there are three SOV constructions instead of one, namely: (i) bare SOV constructions, (ii) SOV-*le* constructions, and (iii) SOV-*guo* constructions, all of which encode Foregrounded Direct Objects. Of the three, only the bare SOV construction is inherently contrastive, and only the SOV-*le* construction encodes Foregrounded Verbs as well as Foregrounded Direct Objects. In addition, it is shown that the three SOV constructions are different from SVO and OSV constructions in that the Subject or the Direct Object can be a Rhematic Focus in the two latter constructions (i.e., they can be the unknown element in a question-answer sequence), but not in the latter one. The fact that the meaning associated with these SOV sentences is non-decomposable, in other words, that it is contingent on the whole sentence and not on any specific component of the sentence, suggests that these grammatical structures are represented in the mind of a speaker.

Keywords: Radical Construction Grammar; Meaning Text Theory; Mandarin Chinese; Subject-Object-Verb; SOV; Semantic-Communicative Structure; Information Structure; Foregrounded; Contrastive.

1 Introduction

Using the Radical Construction Grammar framework (RCG; Croft 2001) and terminology developed by Mel'čuk (2001) to account for the communicative/informational considerations encoded by sentences, the present paper shows that there are three distinct SOV constructions in Mandarin Chinese (MC). The three SOV constructions are (i) bare SOV sentences, which encode Foregrounded and contrastive Direct Objects, (ii) SOV-*le* sentences, which encode Foregrounded Direct Objects and Verbs, and (iii) SOV-*guo* sentences, which encode Foregrounded Direct Objects.

The data used in this study comes from elicitation and the literature (Li 1990; Shyu 2001, 2004; Sun and Givón 1985; Wei 1989; and Zhang 2000 among others). Before saying more, two points need to be mentioned. Firstly, the present paper merely discusses mono-clausal

sentences without coverbs or adverbial phrases.[1] Secondly, it is sometimes said that SOV sentences are S-*ba*^{3}-OV constructions where the coverb *ba*^{3} has been elided. In this study, I follow Li (1990) who convincingly argues this view is incorrect and that SOV sentences are a topic of discussion in their own right.[2] Having said this, let us turn to describing the concepts and notions that will be used here.

2 Notions and Concepts

In this section, notions and concepts relevant to the study are delineated. In section 2.1, the Radical Construction Grammar framework is characterized. In section 2.2, a brief overview of the Meaning-Text Theory (Žolkovskij & Mel'čuk 1967; Mel'čuk 1988, 2001) and relevant aspects of Mel'čuk's (2001) theory of communicative/informational considerations are presented.

2.1 Radical Construction Grammar

RCG, as laid out in Croft (2001), is a non-reductionist theory of grammar that assumes a Conceptual Structure populated by largely universal concepts. The Conceptual Structure underlies the Semantic Structure, which is comprised of language-specific construals of concepts. The Semantic Structure is arbitrarily linked to the Syntactic Structure by a Symbolic Relation. Grammar is thus "a structured inventory of conventional linguistic units" (Langacker 1987: 57); where the term 'linguistic unit' is understood here as construction. A construction, the basic unit in RCG, could be though of as a schematic idiom (Croft 2001: 15). That is, it is a more or less complex linguistic sign composed of a more or less complex Syntactic pole, arbitrarily linked to a more or less complex Semantic pole. The construction has a meronomic relation with its constituents, that is, a part-whole relation between it and the elements that populate it. Symbolic Relations not only link a construction's Syntactic and Semantic poles as a whole, but also the form and meaning of its individual elements. This is illustrated in Figure 1, adapted from Croft (2001: 21).

[1] Coverbs are defined in Po-Ching & Rimmington (2004) as verbs that are similar to English prepositions and that generally occur in conjunction with other verbs (e.g., *dui*^{4} 'towards, facing', *xiang*^{4} 'heading, towards', and *zi*^{4} 'from'). Some coverbs, however, may also function as independent verbs. Consider for instance *zai4*: In *ta*^{1} *zai*^{4} *jia*^{1} *xiu*^{1}*xi* 'he's resting at home' *zai*^{4} is used as a preposition, but in *ta*^{1} *bu*^{4} *zai*^{4} *jia*^{1} 'he's not at home' it is a verb. It is propable that the *zai*^{4} used as a preposition and *zai*^{4} used as a verb are two different lexemes.

[2] For specific details about the differences between these two constructions, see Li Shen (1990: Chapter 5).

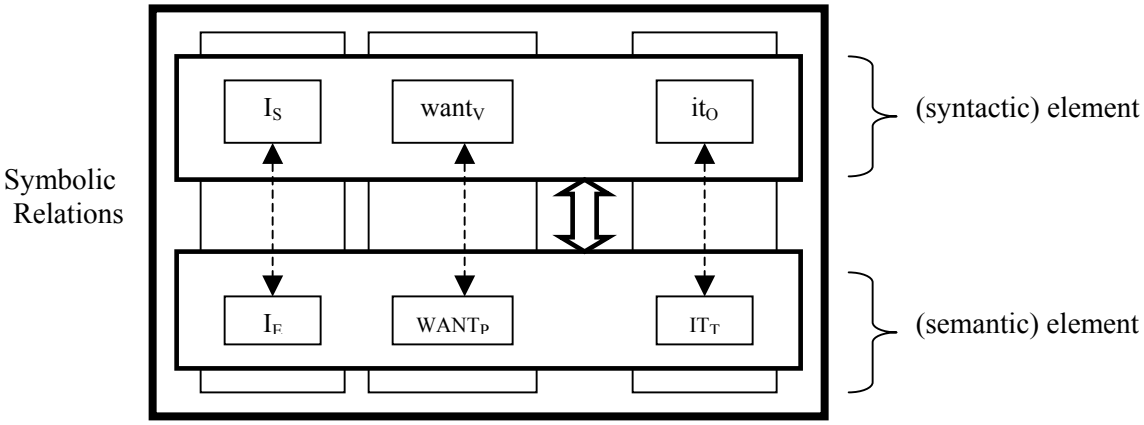

Figure 1
The transitive SVO construction in English.

The sentence *I want it* shown in Figure 1, is an instantiation of the very schematic transitive construction SVO. This construction is characterized by a Subject-Verb-Object Syntactic Structure and an Experiencer-Predicate-Theme Semantic Structure, which are linked through a Symbolic Relation (indicated by the solid arrow).[3] In addition, the SVO construction encompasses other smaller constructions, namely *I*, which in this case takes on the role of the Subject-Experiencer, *want*, which is the Verb-Predicate here, and *it*, the Object-Theme of the sentence. Other examples of English constructions are the *way* construction (Israel 1996; e.g., *Mary coffeed her way out of university*), the passive construction (Rice 1987, 1993; e.g., *Sally was argued with by Bill*), and the *let alone* construction (Fillmore et al. 1988; e.g., *I don't have a penny, let alone a dollar*).

2.2 Semantic-Communicative oppositions

The Semantic Structure, or 'meaning', of a construction includes "all of the conventionalized aspects of a construction's function, which may include not only properties of the situation described by the utterance but also properties of the discourse in which the utterance is found … [as well as] the pragmatic situation of the interlocutor" (2001: 19). The RCG framework as described in Croft (2001) only briefly discusses this aspect of grammar, the focus of the book being Syntax. In this paper, the term 'meaning', more specifically that part of it called 'information structure' by Lambrecht (1994) or 'semantic-communicative structure' by Mel'čuk (2001), will be elaborated on. Given that Mel'čuk's theory of communicative/information structure is used here, relevant aspects of it are briefly discussed.

Before defining the Semantic-Communicative-oppositions of Focalization and Perspective, let us have a succinct look at the framework from which they are borrowed.[4] The Semantic-Communicative Structure divides the Semantic Structure into eight areas, or

[3] Note that the terms Subject, Verb, Object, Experiencer, Predicate, Theme, and others of the sort used in this paper are merely labels utilized to facilitate the discussion, whose definitions are constructionally- as well as language-specifically defined (Croft 2001: 170).

[4] See Žolkovskij & Mel'čuk (1967) and Mel'čuk (1988, 2001) for an in-depth characterization of the Meaning-Text framework.

Semantic-Communicative-oppositions, namely (i) Thematicity (i.e., also known as the Topic-Comment dichotomy); (ii) Givenness; (iii) Focalization; (iv) Perspective; (v) Emphasis; (vi) Presupposedness; (vii) Unitariness; and (viii) Locutionality. Of these eight, one is relevant to the present discussion and will be described shortly. The Semantic-Communicative Structure superimposes on the Semantic Structure to form (a partial) Semantic Representation, an example of which is given in Figure 2.

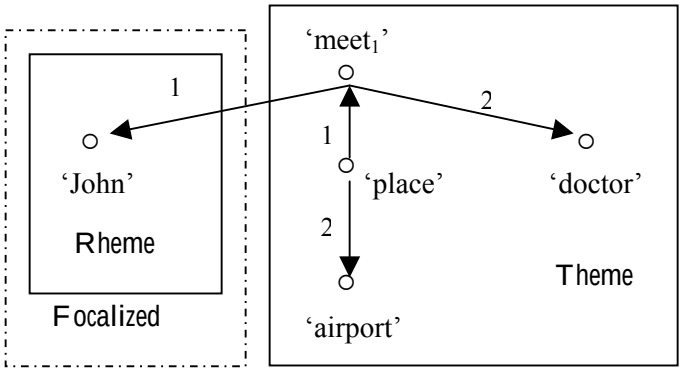

Figure 2
A partial Semantic Representation.

In Figure 2, the numbers labelling the arcs differentiate the different arguments of a functor (e.g., a verb, a preposition, etc.). That is, 'John' is the 1st argument of the functor 'meet$_1$' and 'doctor' is its 2nd argument, whereas 'meet$_1$' is the 1st argument of the functor 'place' and 'airport' is its 2nd argument. In addition, this representation shows that 'John' is the Rheme of the Semantic Structure (what is said about the meeting event), while 'meet$_1$', 'place', 'airport', and 'doctor' are part of the Theme (what the message is about). In addition, 'John' is Focalized.[5]

The Semantic Representation determines the Deep-Syntactic Representation of a sentence, which in turn determines its surface phonological form. The partial Deep-Syntactic Representation corresponding to the Semantic Representation shown in Figure 2 is given in Figure 3 below (adapted from Mel'čuk 2001: 9).

[5] Roughly, a Focalized element is the part of a proposition which the Speaker presents as being logically prominent for him, that is, which is in the speaker's focus of attention. Consider the following dialogue, where *John* in B's utterance is Focalized: A: *I think Mike met the doctor at the airport.* B: *It was John who met the doctor at the airport.*

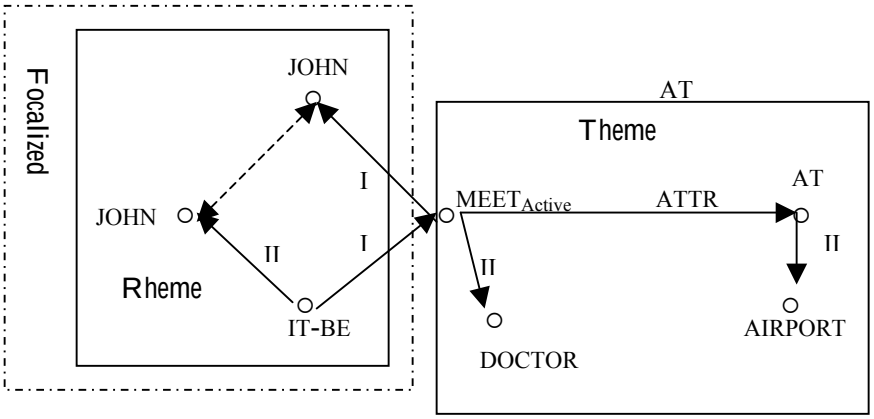

Figure 3
A partial Deep-Syntactic Representation of Figure 2.

The arrows going from one node to another indicate Deep-Syntactic Relations (DSyntRels) such as the actantial DSyntRels I, II, the ATTR(ibutive) DSyntRel, and the COORDINATE DSyntRel. The dashed bi-directional arrow shows obligatory co-reference between the two occurrences of the lexeme JOHN. In Figure 3, it is shown that (i) $MEET_{Active}$ has a DSyntRel I relation to IT-BE, (ii) JOHN has a DSyntRel II relation to IT-BE as well as a DSyntRel I relation to $MEET_{Active}$, (iii) DOCTOR has a DSyntRel II relation to $MEET_{Active}$, (iv) AT → AIRPORT has an Attributive relation to $MEET_{Active}$, and (v) AIRPORT has a DSyntRel II relation to AT. In addition, the superimposed Deep-Syntactic-Communicative Structure (indicated by the boxes) shows that (vi) JOHN is the Rheme, (vii) $MEET_{active}$, DOCTOR, AT, and AIRPORT are part of the Theme, and (viii) JOHN is Focalized.[6] This particular Deep-Syntactic Representation would give rise to B's reply in (1).

(1) [A and B are talking about the doctor, who arrived at the airport yesterday.]

A: I think Mike met the doctor at the airport.
B: It was John who met the doctor at the airport.

In RCG terms, Mel'čuk's theory of Semantic-Communicative Structure reduces to the following: A Semantic-Communicative-opposition is simply part of the Semantic Structure of the element which has that specific Semantic-Communicative-opposition. By way of example, consider the B sentence in (1). This sentence instantiates what is called the Cleft *it BE S who VO*, which is schematized in Figure 4 (the dashed line linking 'x_O' and 'who_s' in the syntactic structure of the construction indicated that these two elements are co-referential; FOC stands for Focalized).

[6] The Deep-Syntactic-Communicative Structure specifies the division of the sentence into Theme-Rheme, Given-New, etc. Part of what constitutes the Semantic-Communicative Structure is encoded, at this level, in the lexical choices made: for instance, adjectives and other types of modifiers vs. finite verbs, as well as the choice of corresponding articles etc. (Mel'čuk 1988: 66).

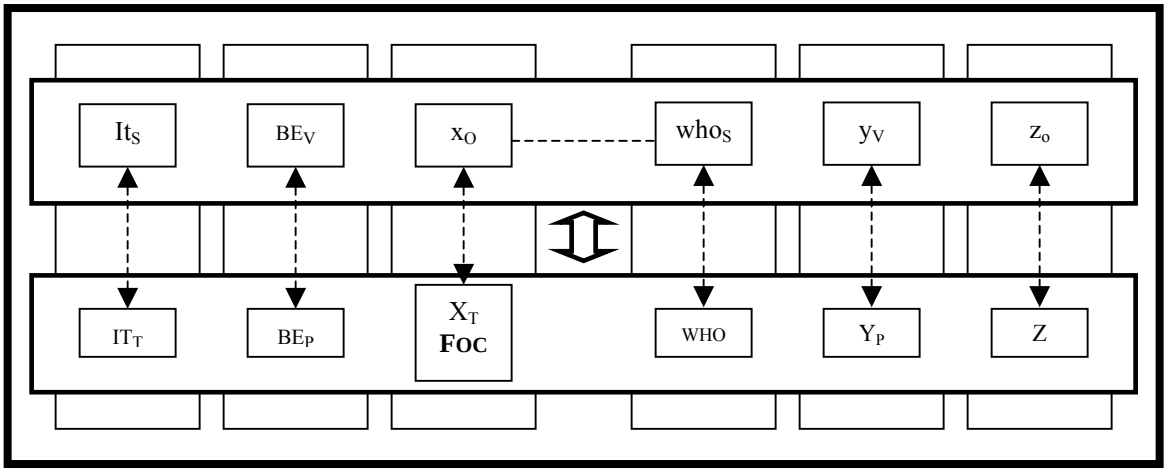

Figure 4
The Cleft *it BE S who VO* construction.

Notice that in Figure 4, the meaning of the element 'x_0' of the Syntactic Structure is partly pre-specified. Indeed, irrespective of the meaning of the word that would fill this position (indicated by 'X_T' in the Semantic Structure), the meaning of 'Focalized' (appearing in bold) is inherently present. In other words, the whole construction encodes a Focalized Subject. In the following sections, the Semantic-Communicative-opposition of Perspective is characterized.

2.3 Perspective

Perspective has the values Foregrounded, Backgrounded, and Neutral. Foregrounded and Backgrounded can be characterized as the part of a Semantic Structure which the speaker presents as psychologically prominent/secondary for him – that is, as having, from his point of view, special/reduced psychological importance with respect to what he wants to communicate (Mel'čuk 2001: 199). To be psychologically prominent is to be central, in the opinion of the speaker, to the situation described, whereas to be psychologically secondary is to be peripheral to it. Neutral amounts to being Neither-Foregrounded-nor-Backgrounded. To exemplify Backgrounding, consider the following sentence.

(2) [John]$_{\text{Neutral}}$, [who is a very good carpenter]$_{\text{Backgrounded}}$, [built this cabinet]$_{\text{Neutral}}$

In (2), the clause *who is a very good carpenter* is Backgrounded, that is, it is secondary in the eyes of the Speaker, while the rest of the sentence is Neutral. What is known as 'possessor raising' is a good example of Foregrounding. In brief, possessor raising 'promotes' the possessor of a noun to a higher 'syntactic rank' at the Deep-Syntactic Structure (Mel'čuk 2001: 204-5). Compare the following French sentences (adapted from Mel'čuk 2001: 206).

(3) a. J'ai lavé sa tête 'I have washed his head'
b. Je [lui]$_{\text{Foregrounded}}$ ai lavé la tête 'I to-him have washed the head'

The non-raised construction appears in (3a). It is shown here that the possessor of *tête* 'head' is expressed via the possessive adjective *sa* 'his', which is dependent on the Direct Object *tête* 'head' (2nd rank dependency), which in turn is dependent on the main verb *ai lavé* 'have washed' (1st order dependency). The construction with raising is given in (3b). In this case, the possessor is expressed by the dative clitic pronoun *lui* 'him', which directly depends on the main verb; the thing washed, namely *tête* 'head' which also directly depends on the main verb, is preceded by the definite article *la* 'the'. In other words, the possessor of the head being communicatively more salient than the possessed is 'promoted' or 'raised' from a 2nd rank dependency to a 1st rank dependency (relative to the main verb).

3 Three SOV constructions in Mandarin Chinese

Many researchers say that the Direct Object in SOV sentences is focused/emphatic/ contrastive (Sun & Givón 1985, Wei 1989, Li Shen 1990, Zhang 2000, and Shyu 2004 among others). This is illustrated below (COMPL stands for COMPLETIVE aspect; tones are indicated by superscripted numbers: ^{1} = high tone, ^{2} = rising tone, ^{3} = falling and rising tone, ^{4} = falling tone, and Ø = neutral tone):

(4) [Lisi asked Zhangsan to wash the car before he gets back from work. During lunch break, Zhangsan calls Lisi to tell him the following.]

a.	wo^3	xi^3–hao^3–le	che^1.zi	(SVO)
	I	wash–good–COMPL	car	
	'I finished washing the car'			

b.	wo^3	[che^1.zi]$_{\text{Focused/emphatic/contrastive}}$	xi^3–hao^3–le	(SOV)
	I	car	wash–good–COMPL	
	'I the car finished washing'			

According to these authors, the Direct Object in (4b) is focused/emphatic/contrastive whereas the one in (4a) is not. Note that in this study, the Direct Object in (4b) is said to be Foregrounded instead of focused/emphatic/contrastive. Others, such as Li Shen (1990), maintain that the DO in (4a) occurs in post-verbal position because it is a secondary Rheme while the Verb is a secondary Theme, but in (4b) the DO appears in immediate pre-verbal position given that it is a secondary Theme while the Verb is a secondary Rheme (also see Shyu 2001).[7] It is important to mention that what underlies the ordering of words here is not

[7] Briefly, the Theme-Rheme opposition is the most universal and relevant of Semantic-Communicative oppositions in that a message necessarily says something (the Rheme) about something (the Theme). The Theme of a sentence can be defined as the part of its Semantic Structure which corresponds to what the message is about, and the Rheme as what is stated about the Theme by means of the sentence. Note that a Semantic Representation necessarily contains a Rheme, but it need not contain a Theme.

the Theme-Rheme opposition, but rather the Semantic-Communicative opposition of Perspective (see Tremblay and Beck, in preparation).

Traditionally, it is thought that SOV sentences comprise one monolithic category of sentences. However, it is argued here that the SOV category is rather heterogeneous. More specifically, it is claimed that there are three SOV constructions namely, (i) bare SOV sentences which encode Foregrounded Direct Objects, which is necessarily contrastive (the sentence is bare in the sense that the verb is not modified by any tense, aspect or mood particle), (ii) SOV-*le* sentences which encode Foregrounded Direct Objects and Verbs (my informants tell me that both the DO and the Verb are prominent in some way), and (iii) SOV-*guo* sentences which merely encode Foregrounded Direct Objects (contrary to the DO in bare SOV sentences, the DO in SOV-*guo* sentences is not necessarily contrastive). The idea that the Direct Object is Foregrounded stems from Wang (1994), who claims that, based on empirical evidence, the Direct Object in *ba3* constructions are Foregrounded. It is also in line with the literature as well as my informants in that the Direct Object in this structure is prominent in some way. I will start by showing that only bare SOV sentences are inherently contrastive.[8]

Some researchers have already pointed out that not all SOV sentences are contrastive. Li Shen (1990) and Shyu (2001) observe that in certain cases SOV sentences fail to show contrast or emphasis. First, let us consider the contrastive sentences in (5), where the contrastive element is underlined in the English gloss, COMPl stands for COMPLETIVE aspect and EXP for EXPERIENCE aspect.[9]

(5) a. [Lisi and Zhangsan are trying to decide what kind of wine they will drink. Lisi names different wines. Zhangsan says that he doesn't drink them, but drinks champagne.]

wo^{3}	[xiang^{1}.bin^{1}.jiu^{3}]$_{\text{Foregrounded}}$	he^{1}	(bare SOV)
I	champagne	drink	
'I <u>champagne</u> drink'			

b. [In a game, there is a list of wines that participants need to drink. Wanting to know which kinds his team-mate drank, Zhangsan reads the list to him. Zhangsan's team-mate informs him that he did not drink any of the wines mentioned so far, but drank champagne.]

wo^{3}	[xiang^{1}.bin^{1}.jiu^{3}]$_{\text{Foregrounded}}$	[he^{1}–le]$_{\text{Foregrounded}}$	(SOV-*le*)
I	champagne	drink–COMPL	
'I <u>champagne</u> drank'			

[8] Note that contrastiveness is part of the Rhetorical Structure (Mel'čuk 2001: 81). Briefly, the Rhetorical Structure specifies the style and rhetorical characteristics that a speaker wants his message to have.

[9] Note that *–le* and *–guo* in (5b) and (5c) convey the meaning of completion and experience respectively. The completion aspect marker *–le* indicates that something has already taken place while the experience marker *–guo* conveys the meaning that the event has been experienced in the past. See Po-Ching & Rimmington (2004) for a more detailed account of these aspectual markers.

c. [Lisi names different kinds of wines. Zhangsan says that he never tasted them before. Then Lisi names champagne, and Zhangsan says that he has drunk it.]

wo^{3}	[xiang^{1}.bin^{1}.jiu^{3}]$_{\text{Foergrounded}}$	he^{1}–guo	(SOV-*guo*)
I	champagne	drink–EXP	
'I champagne have drunk'			

All the preceding sentences have a contrastive meaning. However, only bare SOV sentences necessarily entail contrast whereas the other two types of sentence do not. Note that the contexts in which the following sentences occur impose a non-contrastive reading.

(6) a. [Zhangsan went to see Lisi. Lisi asks Zhangsan what he wants to drink. Zhangsan answers the following.]

*wo^{3}	[xiang^{1}.bin^{1}.jiu^{3}]$_{\text{Foregrounded}}$	he^{1}	(bare SOV)
I	champagne	drink	
'I champagne drink'			

b. [Zhangsan was asked to drink a bottle of champagne. An hour later he goes to the person in charge and says the following.]

wo^{3}	[xiang^{1}.bin^{1}.jiu^{3}]$_{\text{Foregrounded}}$	[he^{1}–le]$_{\text{Foregrounded}}$	(SOV-*le*)
I	champagne	drink–COMPL	
'I finished drinking the champagne'			

c. [Lisi is telling Zhangsan how champagne is the greatest thing he ever drank. Zhangsan says to him the following.]

wo^{3}	[xiang^{1}.bin^{1}.jiu^{3}]$_{\text{Foregrounded}}$	he^{1}–guo	(SOV-*guo*)
I	champagne	drink–EXP	
'I have drunk champagne before'			

The bare SOV sentence in (6a) is unacceptable because it cannot be used in a non-contrastive context; in this case an SVO sentence should be used (i.e., *wo^{3} he^{1} xiang^{1} bin^{1} jiu^{3}* 'I drink champagne'). The SOV-*le* and SOV-*guo* sentences in (6b-c), however, are perfectly fine. The point to be made here, and what is of special interest, is that bare SOV sentences distinguish themselves from SOV-*le* and SOV-*guo* sentences in terms of their inherent contrastiveness.

Another interesting point is that the three types of SOV sentences can be further distinguished with regards to the elements that are Foregrounded. Here we will see that SOV-*le* sentences encode Foregrounded DOs and Verbs, whereas the other two sentence types only encode Foregrounded DOs. The distinction can be made with the help of the marker *lian^{2}* … *dou^{1}* 'even', where *lian^{2}* means 'even' and *dou^{1}* means 'all' (translated in English simply as *even*). This marker has been said to indicate focus/emphasis/contrast (Zhang 2000 and Shyu 2004, among others). As the examples given below show, *lian^{2}* … *dou^{1}* 'even' is not contrastive but rather highlights a similarity between X and a group of things of type Y.

Formally, *lian*^{2}*…dou*^{1} 'even' is considered to mean "X is (against expectations) also in the set of things of type Y which we are discussing" and will be said to be 'additive', following Zhang (2000).[10] The present argumentation hinges on a remark made by Mel'čuk (2001: 183) according to which "a member of a contrastive pair is necessarily Focalized, even if a Focalized element is not necessarily a member of an explicit contrast".[11] I propose to extend this idea to include Foregrounded and Emphasized elements.[12] Applying this extended notion to additiveness, an aditive element is necessarily Focalized, Foregrounded or Emphasized, even if a Focalized, Foregrounded or Emphasized element is not necessarily additive. Note that *lian*^{2}*…dou*^{1} 'even' is not a Foregrounding marker: As evidenced by the sentences in (5) above, the Direct Object, and the Verb in the case of SOV-*le* sentences, are still Foregrounded even if *lian*^{2}*…dou*^{1} 'even' is not present. Having said this, let us first consider the following SOV-*le* sentences, where the additive element is double-underlined in the English gloss.

(7) a. [In a game, there is a list of wines participants have to drink. Wanting to know which kinds his team-mate drank, Zhangsan reads him the list: the Bordeau, the Riesling, etc. Zhangsan's team-mate informs him that he already drank them and adds the following (the champagne is also on the list).]

wo^{3}	lian^{2}	[xiang^{1}.bin^{1}.jiu^{3}]$_{\text{Foregrounded}}$	dou^{1}	[he^{1}–le]$_{\text{Foregrounded}}$
I	even	champagne	all	drink–COMPL

'I even <u>the champagne</u> drank'

b. [Mr. and Mrs. Zhang are in a restaurant; they are having caviar and champagne as an appetizer. Mrs. Zhang wants to smoke a cigarette but there aren't any left in her pack, so she sends her husband to the convenient store to buy some. When Mr. Zhang comes back with the pack of cigarettes he sees that his wife ate all the caviar. Mrs. Zhang then says the following with a smile on her face.]

wo^{3}	lian^{2}	[xiang^{1}.bin^{1}.jiu^{3}]$_{\text{Foregrounded}}$	dou^{1}	[he^{1}–le]$_{\text{Foregrounded}}$
I	even	champagne	all	drink–COMPL

'I even <u>the champagne drank up</u>'

Because both the Direct Object and the Verb are Foregrounded in SOV-*le* sentences, either the Direct Object alone can be additive, as shown in (7a), or both the Direct Object and the Verb can be additive, as illustrated in (7b).

SOV-*le* sentences contrast with bare SOV sentences and SOV-*guo* sentences in that the Verb in these two latter sentence types cannot be additive. Indeed, the Verb in these constructions is not Foregrounded. Consider the following bare SOV sentences.

[10] Note that additiveness, like contrastiveness, is not part of the Semantic-Communicative Structure of a sentence, but rather of the Rhetorical Structure.

[11] As a reminder, a Focalized element is in the speaker's focus of attention (cf. footnote 5, page 4).

[12] The Semantic-Communicative-opposition of Emphasis can be roughly defined as the portion of a Semantic Structure that is presented to the Addressee by the Speaker as having a special emotive importance for him, which tends to be implemented via a special prosody. For example, in *John met a* DOCTOR *at the airport*, where small caps indicate heavy stress and a very emotive prosody, *doctor* is Emphasized.

(8) a. [Lisi asks Zhangsan if he drinks this and that wine. Zhangsan answers that he does and tells Lisi the following.]

wo^{3} lian^{2} [xiang^{1}.bin^{1}.jiu^{3}]$_{\text{Foregrounded}}$ dou^{1} he^{1}
I even champagne all drink
'I even champagne drink'

b. [Zhangsan is telling Lisi how he smokes cigars and eats expensive meals when he goes on business trips. He adds the following.]

*wo^{3} lian^{2} [xiang^{1}.bin^{1}.jiu^{3}]$_{\text{Foregrounded}}$ dou^{1} [he^{1}]$_{\text{Foregrounded}}$
I even champagne all drink
'I even champagne drink'

It is shown here that only the Direct Object is Foregrounded given that the only acceptable sentence is the one in (8a) where the DO only is additive. The (b) sentence is unacceptable because the Verb in bare SOV sentences is not Foregrounded and therefore cannot be additive. For the sentence in (8b) to be acceptable, an SVO sentence and the additive marker *shen^{4} zhi^{4}* 'even' need to be used (the two words *shen^{4}* and *zhi^{4}* individually mean 'very' and 'extremely' and are translated into English simply as *even*).

(9) wo^{3} shen^{4}.zhi^{4} [he^{1} xiang^{1}.bin^{1} jiu^{3}]$_{\text{Foregrounded}}$
I even drink champagne
'I even drink champagne'

Finally, let us look at SOV-*guo* sentences.

(10) a. [Lisi names different kinds of wines. Zhangsan says he has tried them once and adds:]

wo^{3} lian^{2} [xiang^{1}.bin^{1}.jiu^{3}]$_{\text{Foregrounded}}$ dou^{1} he^{1}–guo
I even champagne all drink–EXP
'I have even champagne drunk'

b. [Lisi and Zhangsan are at an upper-class party; caviar and champagne is being served. Lisi asks Zhangsan if he has ever eaten caviar; he says that he has and adds the following.]

*wo^{3} lian^{2} [xiang^{1}.bin^{1}.jiu^{3}]$_{\text{Foregrounded}}$ dou^{1} [he^{1}–guo]$_{\text{Foregrounded}}$
I even champagne all drink–EXP
'I have even champagne drunk'

Similarly to the bare SOV sentences shown in (8), the sentence in (10a) is acceptable because the additive Direct Object is Foregrounded. The (b) sentence, however, is unacceptable given that the Verb is not Foregrounded; thus this element cannot be additive.

The sentence in (10b) becomes acceptable if an SVO sentences and *shen*^{4} *zhi*^{4} 'even' are used. This is illustrated below.

(11) wo^{3} shen^{4}.zhi^{4} [he^{1}–guo xiang^{1}.bin^{1}.jiu^{3}]$_{\text{Foregrounded}}$
I even drink–EXP champagne
'I have even <u>drunk champagne</u>'

Having demonstrated that there are three subtypes of SOV sentences, I will show that SOV sentences have different Semantic-Communicative Structures than SVO and OSV sentences (see Tremblay and Beck, in preparation, for a discussion on Mandarin Chinese SVO and OSV sentences). The three word orders differ from one another in that the Direct Object (and/or the Subject) cannot be a Rhematic Focus in SOV sentences but can in SVO and OSV sentences. The Rhematic Focus supplies the value of an unknown element in a sentence that serves as an answer to a particular question. It is only obligatory in certain discourse situations, as for example in Question-Answer sequences. Let us first look at bare SOV versus OSV sentences (RhF stands for Rhematic Focus and contrastive elements are underlined in the English gloss).

(12) [Lisi and his child are visiting Zhangsan. Zhangsan asks the child what he wants to eat and Lisi answers that the child will eat a sandwich. But his child doesn't want to and says the following.]

a. wo^{3} chi^{1} [jiao^{3}.zi]$_{\text{RhF}}$ (SVO)
I eat dumpling
'I eat <u>dumplings</u>'

b. [jiao^{3}.zi]$_{\text{RhF, Focalized}}$ wo^{3} chi^{1} (OSV)
dumpling I eat
'<u>dumplings</u> I eat'

c. *wo^{3} [jiao^{3}.zi]$_{\text{RhF, Forgrounded}}$ chi^{1} (SOV)
I dumpling eat
'I <u>dumplings</u> eat'

In (12), the Direct Object *jiao*^{3} *zi* 'dumplings' is the Rhematic Focus and is also contrastive. In this situation, an SVO or an OSV sentence can be used while a bare SOV sentence is ungrammatical (as well as any other word order). The same holds for SOV-*le* and SOV-*guo* sentences, as shown in (13) and (14) respectively.

(13) A: [shei^{2}]$_{RhF}$ chi^{1}–le wo^{3}–de jiao^{3}.zi?
who eat–COMPL I–POSS dumpling
'who ate my dumplings?'

B1: [zhang^{1}.san^{1}]$_{RhF}$ chi^{1}–le ni^{3}–de jiao^{3}.zi (SVO)
zhang.san eat–COMPL you–POSS dumpling
'Zhangsan ate your dumplings'

B2: [ni^{3}–de jiao^{3}.zi]$_{Focalized}$ [zhang^{1}.san^{1}]$_{RhF}$ chi^{1}–le (OSV)
you–POSS dumpling zhang.san eat–COMPL
'your dumplings Zhangsan ate'

B3: *[zhang^{1}.san^{1}]$_{RhF}$ [ni^{3}–de jiao^{3}.zi]$_{Forgrounded}$ [chi^{1}–le]$_{Foregrounded}$ (SOV)
zhang.san you–POSS dumpling eat–COMPL
'Zhangsan your dumplings ate'

(14) A: [shei^{2}]$_{RhF}$ chi^{1}–guo jiao^{3}.zi?
who eat–EXP dumpling
'who has eaten dumplings?'

B1: [zhang^{1}.san^{1}]$_{RhF}$ chi^{1}–guo jiao^{3}.zi (SVO)
zhang.san eat–EXP dumpling
'Zhangsan has eaten dumplings'

B2: [jiao^{3}.zi]$_{Focalized}$ [zhang^{1}.san^{1}]$_{RhF}$ chi^{1}–guo (OSV)
dumpling zhang.san eat–EXP
'dumplings Zhangsan has eaten'

B3: *[zhang^{1}.san^{1}]$_{RhF}$ [jiao^{3}.zi]$_{Forgrounded}$ chi^{1}–guo (SOV)
zhang.san dumpling eat–EXP
'Zhangsan dumplings has eaten'

In (13) and (14), the Rhematic Focus is *Zhangsan*. In both datasets, the Subject can be a Rhematic Focus in the SVO and OSV sentences but it cannot in the SOV ones (any other word order is unacceptable).

To recapitulate the section, SOV sentences have been found to encompass three distinct subtypes: (i) bare SOV sentences, (ii) SOV-*le* sentences, and (iii) SOV-*guo* sentences. It was established that even though all three encode Foregrounded Direct Objects, only bare SOV constructions are inherently contrastive, and only SOV-*le* constructions also encode Foregrounded Verbs. Finally, it was shown that SOV sentences have a distinct Semantic-Communicative Structure than SVO and OSV sentences.

4 Conclusion

This paper has elaborated on Croft's (2001) notion of 'meaning', more specifically, on that part called 'information structure' by Lambrecht (1994) or 'semantic-communicative structure' by Mel'čuk (2001), an aspect of the Radical Construction Grammar framework that was left under-described. This was done by examining Mandarin Chinese SOV sentences. Using Mel'čuk's (2001) theory of Semantic-Communicative Structure, it was demonstrated that there are three SOV constructions, namely: (i) bare SOV constructions, (ii) SOV-*le* constructions, and (iii) SOV-*guo* constructions, all of which encode Foregrounded Direct Objects. Of the three, only the bare SOV construction is inherently contrastive, and only the SOV-*le* construction encodes, in addition, Foregrounded Verbs. These constructions are schematized in Figures 5-7, where FOR stands for Foregrounded, CONT for CONTRASTIVE, COMPL for COMPLETIVE aspect, and EXP for EXPERIENCE aspect.

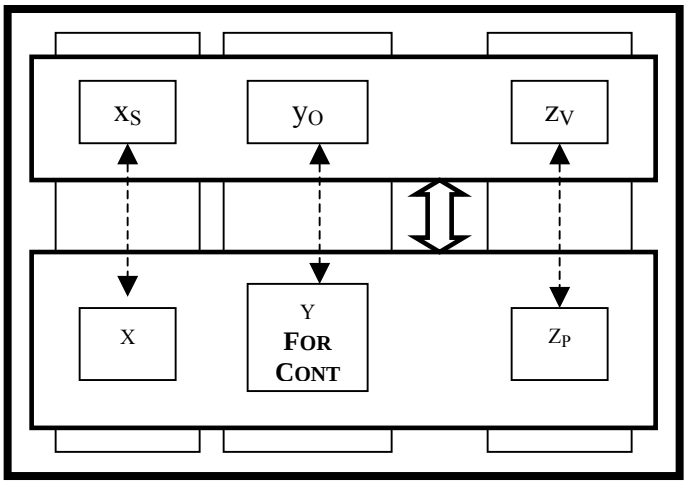

Figure 5
The bare SOV construction.

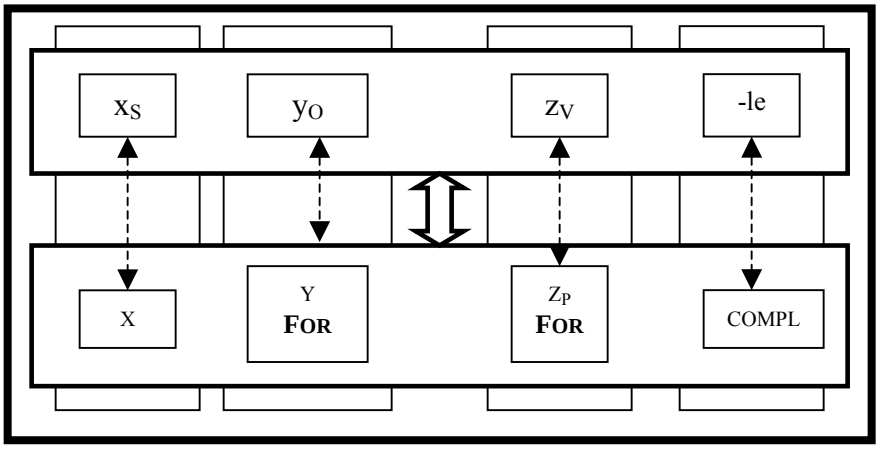

Figure 6
The SOV-*le* construction.

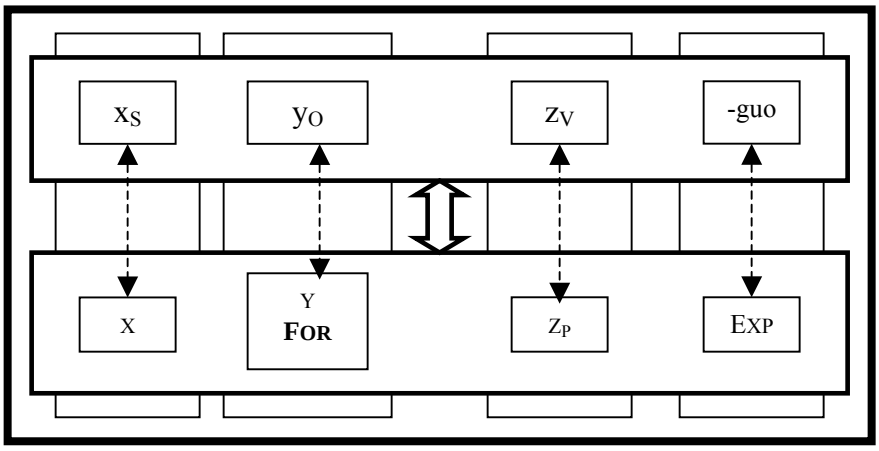

Figure 7
The SOV-*guo* construction.

Moreover, it was shown that the three SOV constructions are different from SVO and OSV constructions in that the Subject and/or the Direct Object can be a Rhematic Focus in the two latter constructions, but not in the three SOV constructions.

SOV sentences have been treated until now as one single type of sentence (Li Shen 1990, Shyu 2001, and Li Eden Sum-hung 2005 among others). However, it was shown that there are three distinct types of SOV sentences. Indeed, the meaning associated with each of these SOV sentences is non-decomposable, that is, it is contingent on the whole sentence and not on any specific component of the sentence. As such, it is probable that these constructions are represented in the mind of a speaker. What is all the more interesting is that these constructions do not encode a specific Semantic Structure (i.e., a propositional meaning), but

rather a specific Semantic-Communicative Structure in addition to, in the case of bare SOV sentences, a specific Rhetorical Structure (i.e., contrastiveness).

Acknowledgments

I wish to thanks David Beck, Igor Mel'čuk, Zhu Xiaolei, Lin Jing Xia, Chun Ling, Yin Hui, and all the informants in China and Canada who have helped me with this study. This paper could not have been written without the aforementioned people's help. The present paper has been supported in part by a Chinese Graduates Association of Alberta Graduate Award, a Province of Alberta Graduate Fellowship, and a SSHRC Doctoral Fellowship (#752-2006-1315)

References

Croft, W. (2001). *Radical Construction Grammar. Syntactic Theory in Typological Perspective*. Oxford: Oxford University Press.

Fillmore, C.J., Kay, P. & O'Connor, C. (1988). Regularity and idiomaticity in grammatical constructions: The case of *let alone*. *Language*, 64.3, 501-38.

Israel, M. (1996). The way construction grow. In A.E. Goldberg (ed.). *Conceptual Structure, Discourse and Language*, pp. 217-30. Stanford: Center for the Study of Language and Information.

Lambrecht, K. (1994). *Information Structure and Sentence Form. Topic, Focus, and the Mental Represention of Discourse Referents*. Cambridge: Cambridge University Press.

Langacker, R.W. (1987). *Foundations of Cognitive Grammar. Vol. I: Theoretical Prerequisites*. Stanford: Stanford University Press.

Li, E.S.-h. (2005). Voice in Chinese. A systemic functional perspective. *Functions of Language*, 12, 181-203.

Li, S. (1990). *On SOV Structure in Contemporary Mandarin Chinese*. PhD dissertation, The University of Nebraska.

Mel'čuk, I.A. (1988). *Dependency Syntax: Theory and Practice*. New York: SUNY Press.

Mel'čuk, I.A. (2001). *Communicative Organization in Natural Language: The Semantic-Communicative Structure of Sentences*. Amsterdam and Philadelphia: John Benjamins.

Po-Ching, Y. & Rimmington, D. (2004). *Chinese: A Comprehensive Grammar*. New York and London: Routledge.

Rice, S. (1987). Towards a transitive prototype: Evidence from some atypical English passives. In J. Aske, N. Beery, L. Michaelis, & H. Filip (eds.). *Proceedings of the13th Annual Meeting of the Berkeley Linguistic Society, February 14-16, 1987, General Session and Parasession on Grammar and Cognition,* pp. 422-34. Berkeley: Berkeley Linguistics Society.

Rice, S. (1993). The so-called pseudo-passive revisited (by a cognitive linguist). *Studi Italiani di Linguistica Teorica e Applicata*, 3, 567-99.

Shyu, S-i. (2001). Remarks on object movement in Mandarin SOV order. *Language and Linguistics*, 2, 93-124.

Shyu, S-i. (2004). (A)symetries between Mandarin Chinese *lian …dou* and *shenzhi*. *Journal of Chinese Linguistics*, 32, 81-128.

Sun, C.-F. & Givón, T. (1985). On the so called SOV word order in Mandarin Chinese: A quantified text study and its implications. *Language*, 61, 329-51.

Tremblay, A. & Beck, D. (In preparation). *Semantic-Communicative-Oppositions and Word Order in Mandarin Chinese*.

Wang, Y. (1994). *Discourse Grounding. The Morphosyntax of the Mandarin Direct Objects*. PhD dissertation, University of Alberta.

Wei, H.-m. (1989). *Word Order of Mandarin Chinese.* PhD dissertation, Michigan State University.

Zhang, N. (2000). Object shift in Mandarin Chinese. *Journal of Chinese Linguistics*, 28, 201-246.

Žolkovskij, A. and Mel'čuk I.A. (1967). O semanticeskom sinteze [On semantic synthesis]. *Problemy kybernetiki*, 19, 177-238. [French translation: *T.A. Information* (1970), 2, 1-85.]