

## **Gestaltist Semantic Compositionality in Chinese V-V Compounds**

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In traditional analysis, the constructions of Chinese V-V compounds are generally categorized, according to the grammatical relation between the component V's, into three major types: coordination (並列式), modifier-head (偏正式) and verb-complement (述補式). Though the widely accepted categorization criteria seem to be simple and straightforward, linguists could often come to completely different judgments about construction type for an ordinary V-V compound, as the case of *yao-dong* 搖動, which is shown in this paper. According to our analysis, such variation on the V-V construction interpretation is by no means occasional, but rather a natural consequence of some potential Gestalt effect in determining the construction type, whenever it is allowed. As a matter of fact, the construction V-V and its component V's simultaneously influence the meaning interpretation of each other, just as what the whole and the parts do in the visual perception of a Gestalt form. We adopt thus a cognitive approach based on Construction Grammar to treat the semantic composition of a V-V compound and propose thus a mechanism of Gestaltist semantic compositionality in constructing the meaning of the compound verb.

Key words: V-V compound, Gestalt, semantic compositionality, Construction Grammar, constructional meaning

### **1. Introduction**

The analysis of V-V compounds has long been an important issue in Chinese linguistics, especially in Chinese syntax. One of the main research interests on this kind of compounds lies in its semantic compositionality: how the sense of a V-V compound can be derived from those of its components, or how two simple events denoted by the component V's combine to denote a new complex event. Linguists working within the generative paradigm tend to treat this subject as the prediction of the argument structure of the compound from those of its component Vs, when they happen to be free verbs and their arguments are apparently available. This approach is especially popular when dealing with a specific kind of V-V compounds that typically possess semantically an

action-*result* or syntactically a verb-*complement* internal relationship between two V elements. Such compounds are thus usually referred to as V-R or V-C compounds. Take *da-po* 打破 as example. The compound is generally regarded as a V-C compound, for the  $V_2$  *po* ('broken') is apparently a resultative state caused by the action  $V_1$  *da* ('hit'). Termed as V-R or termed as V-C, such compounds seem easy to recognize with simple semantic and syntactic criteria. While the way of deriving their argument structure can be quite diverse, the identification of a compound of this type seems to be uncontroversial. However, it is not always the case. As we shall show in this paper, there exist intrinsic difficulties in the categorization of V-V compounds. Such difficulties will, in fact, lead us to reveal the essence of the semantic compositionality in V-V compounds, which is rather different from the classical semantic compositionality in the generative paradigm mentioned above and will be termed as Gestaltist semantic compositionality.

## 2. Construction types involved

It is generally acknowledged that compounds and phrases in Chinese are constructed mainly based on five types of internal structure, namely subject-predicate (主謂式), verb-object (述賓式), coordination (並列式), modifier-head (偏正式) and verb-complement (述補式) (e.g. Chao 1968, Li & Thompson 1981, Tang 1988, et al.). Among the five constructions, Chinese V-V compounds can mostly be classified into three categories according to the grammatical relationship between the two components of the compound. They are coordinate (並列式), modifier-head (偏正式) and verb-complement (述補式), which produces the V-C (or V-R) compounds mentioned above. In the coordination construction, the two components  $V_1$  and  $V_2$  (from now on used to denote respectively the first and the second component V in a V-V compound) are regarded as in a relation of coordination, which means the sense of V-V compound can be intuitively interpreted as " $V_1$  and  $V_2$ ". In many compounds of this type,  $V_1$  and  $V_2$  are semantically very close, if not synonymous or near-synonymous. For example, we have *gou-mai* “購買” ('to buy'), *gong-ji* “攻擊” ('to attack'), and *ben-chi* “奔馳” ('to rush'). In the modifier-head construction,  $V_1$  is supposed to serve as a modifier of  $V_2$ . For many compounds of this type,  $V_1$  often denotes a manner or means of doing the action or activity that  $V_2$  refers to. For example, we have *qiang-gou* “搶購” ('to buy in a panic way'), *wei-gong* “圍攻” ('to attack by siege'), and *fei-ben* “飛奔” ('to rush like a flying object'). In the verb-complement construction,  $V_2$  is taken as the complement of  $V_1$ . In many compounds of this type,  $V_2$  usually denotes the result of the action or activity that  $V_1$  refers to. For example, we have *gou-de* “購得” ('to acquire by purchase'), *gong-xian* “攻陷” ('to occupy after an attack'), and *ben-chu* “奔出” ('to rush out of').

### 3. Difficulty of consistent categorization

As shown above, the categorization criteria for the V-V compounds, mainly based on the internal grammatical relationships between the component V's, may seem to be simple, straightforward and thus widely accepted. However, different linguists could often come to completely different judgments about construction type for an ordinary V-V compound. Take as example the V-V compound *yao-dong* (搖動, literally “shake-move”). According to Tang’s (1989:21) analysis, the verb should be considered as a compound of coordination construction. Against his analysis, Chang (2003) argues that the compound *yao-dong* should be treated as verb-complement, proposing that *yao-dong*, as other verbs of form V-*dong*, meaning ‘to do something (V) to an object and have it moved as a result’. In fact, in his later analysis, Tang (1994:54) changes his opinion, regarding the same compound *yao-dong* 搖動 as a verb-complement. But is it really better to analyze the compound as a verb-complement? If the *dong* 動 is realized as possessing a causative meaning ‘cause to move’, why can *yao-dong* not be analyzed as a compound of coordination construction with a meaning ‘to shake and move (something)’. As a matter of fact, the causative *dong* is exactly what is needed to deal with a similar compound 動搖, which is analyzed by Tang (1994:54) as a compound of coordination. Obviously, such an analysis demands *dong* 動 and *yao* 搖 be regarded as roughly synonymous. Therefore, if the latter is a causative verb, the former has to be a causative one, too. Now it seems that to firmly determine the construction type is not an easy job, at least for a simple V-V compound like *yao-dong* 搖動. What makes the job even more difficult is: what if *yao* 搖 is regarded as a subtype of *dong* 動 and analyzed as denoting a certain manner of *dong* 動? That is to say, why can the verb not be treated as a compound of modification with the V<sub>1</sub> modifying the V<sub>2</sub> indicating certain manner of doing the action/activity of V<sub>2</sub>? In fact, such a point of view is reflected in Packard’s (2000:94) analysis of *dou-dong* 抖動 (literally ‘tremble-move’), a similar compound of form V-動, as ‘V<sub>1</sub> modifying V<sub>2</sub>’. A question now arises: is there only one allowed to be “correct” among the three different analyses mentioned above? Is the disaccord among the linguists in this case only an occasional one? Or is it meant to be inevitable in general? In order to address these questions, we shall start by exploring the semantic prototypes conveyed in the construction types involved.

### 4. Constructions and their prototypical semantic interpretation

As we have noticed, the V-V compound *yao-dong* 搖動 can be analyzed by different linguists as derived from all three possible types of construction above. The construction analysis is obviously influenced by three different possible interpretations of the event in

question: “to shake and to move something”, “to move something by means of shaking”, and “to shake something and end in moving it”. It is such interpretations that lead to the analysis of *yao-dong* 搖動 as compound of coordination construction, of modifier-head construction, and of verb-complement construction respectively. Each representation here reflects in fact a certain prototypical semantic relation between  $V_1$  and  $V_2$  in their corresponding construction type, which is key to understanding the semantic composition of the V-V constructions involved.

The interpretation variance suggests that the construction type analysis can be viewed as a problem of linguistic categorization. That is, in determining the construction type here, we are categorizing a given V-V compound according to the prototypical semantic interpretations of the related construction types. Such a categorization process is thus subject to the principle of prototype effect according to cognitive linguists like Lakoff (1987) and Taylor (1989). By prototypical interpretation of a certain construction type here, we mean the semantic relationships between  $V_1$  and  $V_2$  that hold for the prototypical members, the widely acknowledged “good examples”, of that construction type. We propose the prototypical relationships between the component V’s in different construction types as follows:

- (1) In a V-V of coordination construction,  $V_1$  and  $V_2$  are synonymous (or near-synonymous);  $V_1$  can be a *subtype* of  $V_2$ , and vice versa.
- (2) In a V-V of modifier-head construction,  $V_1$  is the *means* or *manner* of  $V_2$ .
- (3) In a V-V of verb-complement construction,  $V_2$  is the *effect* of  $V_1$ .

**Table 1:** Prototypical interpretation of a certain construction type

Construction type	Semantic prototype
並列 (coordination)	$V_1 \sim V_2$ ; $V_1 = \text{subtype} (V_2)$
偏正 (modifier-head)	$V_1 = \text{means/manner} (V_2)$
述補 (verb-complement)	$V_2 = \text{effect} (V_1)$

As long as the interpretations sound reasonable, the corresponding grammatical relationships between the components will emerge as a natural consequence, especially as character morphemes are highly polysemous in Chinese, of which the grammatical function analysis is correspondingly flexible. The grammatical interpretation is, in other words, supposed to be led by the semantic interpretation due to the prototype guideline. Therefore, when *yao-dong* 搖動 is regarded as a verb-complement compound, *dong* is interpreted as inchoative “move”, which is the effect of causative “shaking” denoted by *yao*. The verb can be paraphrased as “搖而使之動” in a classic-style expression, a traditionally preferred way of illustrating a compound’s sense with those of its

components. When *yao-dong* 搖動 is regarded as a modifier-head compound, *yao* is interpreted as “shake”, which is the means of causative “moving” denoted by *dong*. Likewise, the verb can be paraphrased as “搖以動之”. When *yao-dong* 搖動 is regarded as a coordination compound, *yao* is interpreted as “shake”, which is now realized as a synonymous subtype of the causative “moving” denoted by *dong*. The verb can be paraphrased as “搖之動之”.

## 5. Gestalt effect in the sense interpretation

### 5.1 Effect-goal duality of $V_2$

In fact, if we take a closer examination of the two semantic interpretations of the compound *yao-dong* 搖動, the one as “搖而使之動” and the one as “搖以動之”, we shall find that the nuance difference between them is delicately bound one to the other. As mentioned, in the first interpretation, the  $V_2$  *dong* 動 is the **effect** of  $V_1$  *yao* 搖, while in the second interpretation,  $V_1$  *yao* 搖 is the means of  $V_2$  *dong* 動, which means, in other words,  $V_2$  *dong* is the **goal** of  $V_1$  *yao* 搖. But what is the difference between effect and goal? In fact, the goal and the effect can be viewed as the corresponding elements of one sequence scheme projected in two domains: the intention world domain and the real world domain. The one projected in the intention world domain becomes means-goal scheme, while the one projected in the real world domain becomes cause-effect scheme.  $V_2$  as either the goal event or the effect event is preceded by another event, means or cause, which is denoted by  $V_1$ .<sup>1</sup> Since a realized goal can be regarded as an effect, and an intended effect can be regarded as a goal, it could be extremely difficult, if not impossible, to distinguish a means-goal scheme from a cause-effect one in a V-V compound involved without the help of context. On the contrary, with proper contextual information, the reader would be led to a natural judgment for the conceptual scheme, and by consequence the construction type for the V-V compound. For example, the *yao-dong* 搖動 in sentence (4) will naturally be considered as in a means-goal scheme,

<sup>1</sup> In fact, as an argument for her analysis of the sequential event relationship in V-V compounds, Chang (2003) has noticed that the *goal* event and the *result* event are closely connected by intention and realization, though she suggests that the concept ‘control’ be used to distinguish the two event types. However, we are convinced that the controllability of  $V_2$  depends on the context instead of the mere event knowledge of  $V_2$ . According to Chang, a controllable  $V_2$  is a goal, while an uncontrollable  $V_2$  is a result. Such a criterion seems to be straightforward and reasonable. But, how can we distinguish, in the case of 搖動, ‘to move something by accident’ and ‘to move something intentionally’, which are both possible interpretation of the 動 in 搖動? We cannot infer anything for sure without the proper context, as will be shown in sentences (4) and (5).

while the *yao-dong* 搖動 in sentence (5) a cause-effect one.

- (4) 他 決定 用 搖 的 也 要 搖動 這 棵 大 樹  
ta jueding yong yao de ye yao yao-dong zhe ke da shu  
he determine use shake DE also want shake-move this CL. Big tree  
'He is well determined to make this big tree tremble even by shaking.'
- (5) 他 搖 著 搖 著 竟 搖動 了 這 棵 大 樹  
ta yao zhe yao zhe jing yao-dong le zhe ke da shu  
he shake ZHE shake ZHE surprisingly shake-move LE this CL. Big tree  
'He shakes and shakes, and, (to his surprise), he makes this big tree tremble.'

From this pair of examples, we can see that there exists an interpretation duality for a simple V-V compound like *yao-dong*, which we term the goal-effect duality of  $V_2$ .<sup>2</sup> Such a duality represents in fact the possibility of shifting between a means-goal scheme and a cause-effect scheme in interpreting the roles of the related events. The goal-effect duality here reminds us of the Gestalt effect in visual perception, the relevant cognitive principles which are adopted in cognitive linguistics. It is just like switching the way of seeing in the well-known face/vase illusion (see Figure 1), respectively choosing different components as figure (face or vase) and as ground (the remaining parts). We propose that the essence of shift here is the choice of semantically profiled event, which is the figure.<sup>3</sup> Take *yao-dong* 搖動 as example. In the first choice, the *dong* 動 is profiled as the figure (see Figure 2b). Since the  $V_2$  is now more “prominent” or more “salient”, the construction involved is regarded as a modifier-head one. In the second choice, in contrast, it is the *yao* 搖 that is profiled as the figure (see Figure 2a). Now that the  $V_1$  is more prominent in this case, the construction involved is to be regarded as a verb-complement one.

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<sup>2</sup> For the goal-effect duality of  $V_2$  here, we have also, of course, the means-cause duality of  $V_1$ , as the other of a coin; the latter is, however, not in the analysis focus of this paper.

<sup>3</sup> In Langacker's (1987) terms, figure and ground can also be referred to as respectively profile and base.

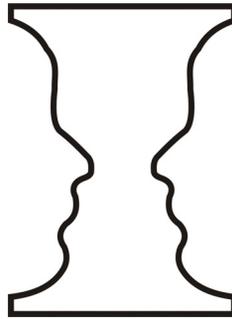


Figure 1: Face or Vase?

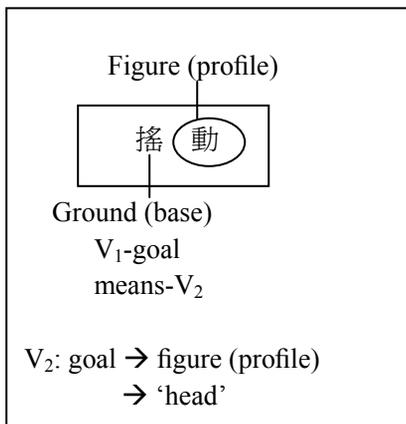


Figure 2a:  
偏正式 (modifier-head)

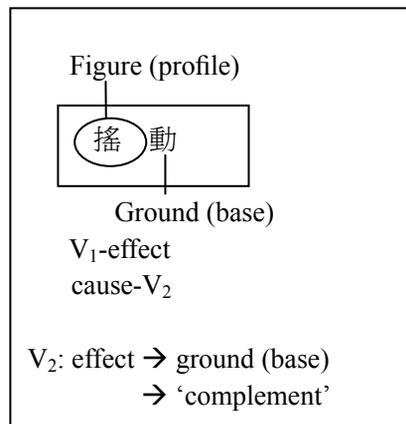


Figure 2b:  
述補式 (verb-complement)

## 5.2 Manner/means-subtype duality of V<sub>1</sub>

As we have mentioned, the *yao* 搖 ('to shake') in the compound verb *yao-dong* 搖動 can also be realized as a subtype of *dong* 動 ('to move') denoting a certain manner or means of 'moving'. According to this interpretation, we have in fact two choices of construction categorization: we can treat *yao* 搖 and *dong* 動 as near-synonymous components, thus forming a compound of coordination type; or we can treat *yao* 搖 as a modifier to the head *dong* 動, thus forming a compound of modifier-head type. As we shall show in this section, there exists another kind of duality in the construction categorization: the manner/means-subtype duality of V<sub>1</sub>.

To better illustrate the essence of this manner/means-subtype duality, let us examine the case of two V-V compounds *sao-chu* 掃除 (literally 'sweep-remove') and *ge-chu*

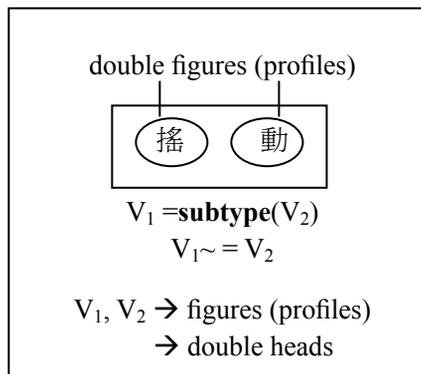
割除 (literally ‘cut-remove’). In both *sao-chu* 掃除 and *ge-chu* 割除, the  $V_1$ ’s 掃 and 割 denote the manner or means of the action  $V_2$  ‘removing’. Certainly they can be interpreted as “掃以除之” and “割以除之” with an intentional reading, as shown in the following phrases:

- (6) a. 拿 掃帚 掃除 地 上 的 垃圾  
 na sao-zhou sao-chu di shang de lese  
 take broom sweep-remove ground on DE trash  
 ‘to take a broom to remove the trash on the ground by sweeping’
- b. 開刀 割除 盲腸  
 kaidao ge-chu mangchang  
 operate cut-remove appendix  
 ‘to undergo an (appendectomy) operation to remove the appendix (by cutting)’

However, the 掃 (‘to sweep’) in *sao-chu* 掃除 and the 割 (‘to cut’) in *ge-chu* 割除 can also be viewed as a subtype of the action 除 (‘to remove’) with a specific means of removing, for they can be used alone to convey, within its implication, the meaning ‘to remove’, as in the following expressions (7a) and (7b). The sense of ‘removing’ is even more evident in sentences like (8a) and (8b).

- (7) a. 掃 垃圾  
 sao lese  
 sweep trash  
 ‘to sweep the trash’
- b. 割 盲腸  
 ge mangchang  
 cut appendix  
 ‘to undergo an appendectomy operation’
- (8) a. 垃圾 已經 掃 了  
 lese yijing sao le  
 trash already sweep LE  
 ‘The trash has been swept away.’
- b. 盲腸 已經 割 了  
 mangchang yijing ge LE  
 appendix already cut LE  
 ‘The appendix has been removed.’

Therefore it is well grounded to argue that 掃除 *sao-chu* and 割除 *ge-chu* can also be interpreted as “掃之除之” and “割之除之” and thus be categorized as compounds of coordination construction formed by two synonymous component V’s. As we can see in the case of 掃除 *sao-chu* and 割除 *ge-chu*, if two verbs  $V_1$  and  $V_2$  are in a means(manner)-goal relationship, the means(manner)-carrying verb  $V_1$  is very likely to acquire a general sense of the goal action ( $V_2$ ). Such a meaning extension seems to be quite universal in Chinese and even cross-linguistic. A quick look at the usage of corresponding verbs in English will shows us that both ‘cut’ and ‘sweep’ can mean ‘to remove, to eliminate’. It is due to such a universal meaning extension that the manner/means-subtype duality will exist as an inevitable problem in the construction categorization when relevant V-V compounds are involved. In light of this manner/means-subtype duality, we can again analyze our compound *yao-dong* 搖動 as derived from coordination construction with its two component *yao* 搖 and *dong* 動 both profiled as figures (see Figure 2c).



**Figure 2c:** 並列式 (coordination)

Given the role duality of components  $V_1$  and  $V_2$ , the V-V interpretation variation among linguists, as in the case of *yao-dong*, is by no means occasional, but rather a natural consequence of some potential Gestalt effect in determining the construction type, whenever it is allowed.

### 5.3 Constructional meaning

So far we have discussed the relation between the construction type judgment and the sense interpretation of the V-V compound, showing that the former influences the latter. In fact, according to the Construction Grammar approach (cf. Goldberg 1995), a construction possesses its own meaning, which is to be fused with the meanings of its

constituent lexical elements to obtain the sentential meaning. For example, the global “transfer” meaning in sentences (9) and (10) should be, according to Goldberg (1995), contributed by the construction itself, instead of by the verbs *kick* and *sneeze*:

- (9) Joe kicked Bill the ball.
- (10) Sam sneezed the napkin off the table.

As we have noticed, the construction type plays an important role in determining the meaning of a V-V compound. Different interpretations of the same V-V compound can be brought by different judgments for its construction type: coordination, modification, or verb-complement. In our analysis, this phenomenon can be well accounted for within a Construction Grammar approach: the constructional meaning, as well as those of the component V’s, are supposed to participate in the semantic composition; different construction types seem to contribute different constructional meanings.

Thus, we propose as follows the constructional meanings for the three types of V-V compounds. (1) A V-V construction of modifier-head type contributes a meaning of “ $V_2$  by means of  $V_1$ ” or “ $V_2$  with a manner of  $V_1$ ”. Therefore, in the case of *sao-chu* 掃除, such a constructional meaning can be fused with ‘sweep’ and ‘remove’, the senses of lexical components 掃 and 除, to acquire the meaning for the compound as a whole ‘to remove by means of sweeping’ or ‘to remove with the manner of sweeping’. (2) A V-V construction of verb-complement type contributes a meaning of “ $V_1$  with  $V_2$  as its effect”. Again in the case of *sao-chu* 掃除, such a constructional meaning can be fused with ‘sweep’ and ‘remove’ to acquire the meaning ‘to sweep and to remove as a result’. (3) A V-V construction of coordination contributes a meaning of “ $V_1$  and  $V_2$ ”. In the case of *sao-chu* 掃除, such a constructional meaning can be fused with ‘sweep’ and ‘remove’ to get the meaning ‘to sweep and to remove’.

## 6. Gestaltist semantic compositionality

Through the role duality of components  $V_1$  and  $V_2$  in a V-V compound as in the case of *yao-dong*, we have seen a *Gestaltist* way of “viewing” the semantic composition of a V-V compound, just as we do when perceiving the famous face/vase illusion (see again Figure 1). When we see a face in the illusion, the left and right parts will be “interpreted” as two human heads in profile, as the rest perceived simply as the background. In the other way, when we “see” a vase in the illusion, the middle part will be “interpreted” as the body of a vase, as the left and right parts now perceived as the background. What is the most important in the visual recognition is that the “interpretations” of the parts and that of the whole are simultaneously determined and

influenced by each other, which is the very essence of the Gestalt effect.

Likewise, our way of interpreting the senses of component V's and the constructional meaning in a V-V compound is *Gestaltist*. For example, when we “see” a modifier-head construction in the compound verb *yao-dong* 搖動, we “perceive” *yao* 搖 as ‘to shake as a means of moving thing’ and “perceive” *dong* 動 as a causative verb ‘to move something’. And vice versa. On the other hand, when we “see” a verb-complement construction in the same compound *yao-dong* 搖動, we “perceive” *yao* 搖 as a causative verb ‘to shake’ and “perceive” *dong* 動 as an inchoative verb ‘to move’. And vice versa. In this case, we see that the interpretation difference between causative and inchoative sense of *dong* 動 is influenced by the interpretation of construction itself, and vice versa. The mutual influences have to be exerted simultaneously, for any of the possible interpretations comes so naturally and immediately. In fact, such simultaneous mutual influences of interpretation also exist among the three semantic “parts”: the sense of the construction V-V, the sense of  $V_1$ , and the sense of  $V_2$ . The sense of the compound as a whole is, according to our Construction Grammar approach, the fusion of the three sense units above, following the principle of semantic compositionality. However, such semantic compositionality has to work in a Gestaltist way, as in the Gestaltist compositionality proposed by Victorri & Fuchs (1996). For the construction V-V and its component V's simultaneously influence the meaning interpretation of each other, just as what the whole and the parts do in visual perception of a Gestalt form. We thus term it *Gestaltist* semantic compositionality in Chinese V-V compounds.

The characteristics of Gestaltist compositionality is, according to Victorri & Fuchs (1996), the simultaneous interaction between the interpretations of the polysemous units in an utterance, which can perhaps be best demonstrated in the perception of a drawing like Figure 3a. “... [T]he different elements change their senses when we pass from the perception of an old woman to that of a young woman: the eye becomes the ear, the nose becomes the chin, and the mouth becomes the neck fold...” (Victorri & Fuchs 1996: 177). They also propose a new computational model based on such a new way of compositionality to calculate the meaning of a sentence, which is able to carry out the task in which a procedural model based on the classical compositionality is doomed to fail. In fact, an automatic sense-determining system based on such Gestaltist compositionality (a non-procedural way of determining the compound sense without determining previously the components' senses) has been implemented and shown to function efficiently in predicting the senses and the semantic classes of V-V compounds (cf. Chen 2004, 2007).



**Figure 3a:** Young lady or  
Old woman?



**Figure 3b:** Old woman  
(with glasses)



**Figure 3c:** Young lady  
(smoking, wearing an earring)

### 6.1 V-V construction as a polysemous entity

As we have seen, in the mechanism of Gestaltist compositionality, it is the polysemous parts that serve as the basic semantic units, which influence the interpretation of each other. Obviously, in the case of V-V compounds, the potential means-subtype duality of  $V_1$  and the potential goal-effect duality of  $V_2$ , which is due to the potential polysemy of  $V_1$  and  $V_2$ , play the role of the polysemous parts, just as the eye-ear part and the nose-chin part do in the perception of the drawing of Figure 3a. In the other way, every “polysemous” part in the drawing of Figure 3a represents an item of a certain duality (the eye-ear duality, the nose-chin duality, and the mouth-neck fold duality). To break the effect of the duality, we need only to add some “*déclencheur*” (like the glasses in Figure 3b and the cigarette in Figure 3c), as Victorri & Fuchs term it, to limit ourselves to a certain way of perception (the old woman in Figure 3b and the young lady in Figure 3c). Just as the drawing can be “disambiguated” by the *déclencheur*, so the polysemous parts in the V-V compound can be disambiguated by the context, as in sentences (4) and (5).

Now let us examine the role played by the construction in constructing the sense of the V-V compound as a whole. Compared with the perception of the young/old woman drawing, the constructional meaning plays the corresponding role of the global profile, which is surely “polysemous”, too: it can be a profile for an old lady and a profile for a young woman in the meanwhile. According to Goldberg (1995), a construction can be polysemous, just like the ordinary lexical items. In Chinese, polysemous constructions have also been shown to exist (cf. Chen et al. 1995, Chen 2001). Now that the three types of the V-V construction possess different constructional meanings and a construction can be polysemous, we suggest that the three constructional meanings be viewed as the polysemy of a single construction: the V-V construction. Such a polysemy viewpoint

can, in fact, be supported by the fact that the meanings involved, the three constructional meanings, are historically related. For the three types of the V-V construction, coordination, modification, and verb-complement, are generally believed to be highly entangled, all as the result of the evolution of the serial verb construction in Chinese (e.g. Mei 1991, Jiang 2001, Feng 2002, et al.). Viewing the V-V construction as a polysemous one, the Gestaltist semantic compositionality in a V-V compound involves thus the interaction of three polysemous parts in a V-V compound: the  $V_1$ , the  $V_2$  and the V-V construction itself.

## 7. Conclusion

In this paper, we explore the semantic compositionality of Chinese V-V compounds within a cognitive approach and a constructionist approach. First, we show the Gestalt effect in interpreting the role of the component  $V_1$  and  $V_2$  and propose thus the goal-effect duality of  $V_2$  and the manner/means-subtype duality of  $V_1$ . Such role duality based on a mere profiling shift of the component V can account for the categorization disaccord among linguists for a V-V compound like *yao-dong* 搖動, which turns out to be no occasional case. For the potential role duality of  $V_1$  and  $V_2$  allows  $V_1$ - $V_2$  to be possibly in a means-goal, cause-effect, or subtype-type relationship as long as the sense nuance of the component V's allows, which makes it extremely difficult to determine the type of certain V-V compounds. We also argue for three prototypical relationships between  $V_1$  and  $V_2$  in the three traditional types of V-V compounds: (1)  $(V_1, V_2) = (\text{means/manner}, \text{goal})$  in a V-V compound of modifier-head type, (2)  $(V_1, V_2) = (\text{cause}, \text{effect})$  in a V-V compound of verb-complement type, (3)  $(V_1, V_2) = (\text{subtype}, \text{type})$  in a V-V compound of coordination type. Based on Construction Grammar, we further propose that the three prototypical  $V_1$ - $V_2$  relationships constitute the constructional meanings of the V-V construction, which is itself a polysemous linguistic entity. The constructional meaning is to be fused with the senses of component V's to obtain the meaning of a V-V compound as a whole. The global sense interpretation of the V-V compound in question is then shown to be the result of the mutual sense influence, just as in a Gestalt illusion, between three potentially polysemous parts: the V-V construction, the  $V_1$  and the  $V_2$ . Such mutual sense influence is to be done simultaneously in a Gestaltist mechanism, which we call Gestaltist semantic compositionality. According to the Gestaltist semantic compositionality, certain V-V compounds, like *yao-dong* 搖動, can potentially possess different sense interpretations, which are conceptually tied one to another, just as the figure recognition either as a young lady or as an old woman in the famous ambiguous figure.

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## 中文 V-V 複合動詞中之完形語義合成性

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根據傳統之分析，中文裡的 V-V 複合動詞，一般說來可依據其二個動詞成分 V 之間的語法關係分成三種主要構式，分別是並列式、偏正式和述補式。雖然此等廣為接受之區分標準看起來清楚而直接，但是不同語言學家在判斷同一個 V-V 複合動詞之構式時，卻往往有所差異。根據本文之分析，造成這種對 V-V 構式不一致的詮釋情形絕非偶然，而是潛在的完形 (Gestalt) 效應作用下自然而然產生的結果。事實上，對於一個 V-V 複合動詞，整個構式的語義與其個別動詞成分 V 的語義之間，在詮釋上起著同時相互影響的作用；正如同在觀看一個完形圖形時，視覺對圖形中之「整體」和「部分」之詮釋一樣。本文基於構式語法 (Construction Grammar) 理論，強調認知對語意造成的影響與效應，提出對 V-V 複合動詞的語義合成性之分析，主張在 V-V 複合動詞的語義建構上存在有一種完形式的語義合成機制。

關鍵詞：V-V 複合動詞，完形，語義合成性，構式語法，構式語義