# Metaphor, Inference, and Conceptualisation<sup>\*</sup>: On the Development of V-*diao* Construction in Mandarin Louis Wei-lun Lu (呂維倫)

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#### Abstract

### Keywords: Construction Grammar, metaphorical transfer, conceptualization

V-diao constructions, according to their semantics, fall into three categories:

- A) Physical disappearance from its original position, with the V slot filled by physical verbs, such as *tao-diao* "escape", *diu-diao* "throw away", and so on.
- B) Disappearance from a certain conceptual domain, rather than from the physical space, with the V slot filled by less physically perceivable verbs, such as *jie-diao* "quit", *wang-diao* "forget" and the like.
- C) The third category of V-*diao* involves speaker's subjective, always negative, attitude to the result. Examples include: *lan-diao* "rot", *ruan-diao* "soften", *huang-diao* "turn yellow", and so forth.

The meaning in Type C constructions cannot be gained by simply putting their component parts together, so in this study, I shall term V-*diao* as a construction (Goldberg 1995) rather than merely a resultative compound (Li and Thompson 1981).

Metaphor, as a mechanism of semantic change (Sweetser 1990, Bybee, Perkins and Pagliuca 1994, Heine, Claudi and Hunnemeyer 1991), is a plausible account of the polysemy between Type A and B. Type A denotes disappearance from physical space, while Type B disappearance from the conceptual space. I thus speculate on the mapping relation between the physical and the abstract, conceptual domain.

Other than metaphor, pragmatic inference is claimed to be a major mechanism of semantic change (Hopper and Traugott 1993, Bybee, Perkins and Pagliuca 1994). In such changes, context plays a crucial role. Frequent use of a grammatical or lexical unit in a particular context may lead to the inference that the context is an integral part of its meaning. The development of Type C V-*diao* may relate to frequent co-occurrence of negative verbs and *-diao*. (The reason why only negative verbs are allowed in the construction will be further addressed in the next section.) Consequently, negative connotation may spread to the entire construction and give rise to the constructional meaning.

<sup>&</sup>lt;sup>\*</sup> I'm grateful to Dr. Lily I-wen Su for her insightful comment on this paper.

There also exists a cognitive constraint on its applicability. The construction does not allow verbs with positive connotation in the V slot. This is because, the semantics of the construction cannot contradict the metaphor it is based on (Huang and Chang 1996). Also, it cannot override, either, the orientational metaphor based on human experiential basis (Lakoff and Johnson 1980): GOOD IS UP; DOWN IS BAD.

Hopefully, this study can serve as a valid argument for the interaction of our language use and grammar, and the conceptual basis of human language.

# 1 V-diao as a Construction

V-*diao* is traditionally termed as a resultative compound (Li and Thompson 1981). However, in this study, I shall avert this conventional terminology and treat it as a construction instead, because it actually denotes something more than what its components literally give. In this paper, I shall adopt the definition of Goldberg (1995), and Fillmore, Kay, and O'Connor (1988), to define a "construction" as follows: A construction refers to a form-meaning pair, the meaning of which cannot be strictly predictable from its component parts or from other previously established constructions. It may specify not only syntactic, but also lexical, semantic, and pragmatic information.

But as a construction, what is its constructional meaning? Also, what are the driving forces of the emergence of constructional meaning? Furthermore, a selectional restriction seems to stand in what properly fits into the V-slot. In this paper, I shall attempt to look into the constructional meaning, its driving forces, and finally, the selectional constraint of the verb.

V-*diao* construction comprises a verb (be it action or stative), and a verbal suffix -*diao*. It gives the final state of the agent, if used intransitively, and of the receiver of the action, in transitive cases. It may represent: A) Physical disappearance of an entity from its original position, B) Disappearance from a certain conceptual domain,

and C) Speaker's subjective evaluation on the result of an event, as in (1)-(3)

respectively.

(1) ta	qiaoqiao	pao-diao	le			
he	quietly	run away	CRS			
"He ran av	way quietly."					
(2) ta	jie-diao	le	nage	huai		
xiguan						
he	get rid of	Perf	that	bad	habit	
"He got rid of that bad habit."						
(3) diennau	zuotien	huai-di	ao	le		
computer	yesterda	y break o	lown	CRS		
"The computer broke down yesterday."						

I shall begin this paper with a close look at the semantics of the foregoing types of V-*diao*, especially the last one, since Type C constructions involve an intriguing phenomenon: the interpretation of negative results cannot be gained directly from the compositional parts of a construction, as indicated in Goldberg (1995). Later I shall further look into how the constructional meaning emerges.

### **1.1** Physical Disappearance

It is reported that a suffix in a resultative verb compound indicates the result of an action (Li and Thompson 1981). The first kind of *-diao* gives the final state, i.e., physical absence, of the agent or the patient. Mostly this kind of *-diao* is affixed to easily perceivable physical action verbs such as *pao* "run", as in (1), *diu* "throw", *shao* "burn", and so on.

### **1.2** Disappearance from a Conceptual Domain

The second sort of V-*diao* denotes also the result of an action. However, this differs from type A in the sense that it represents a less "concrete" disappearance. It is often attached to low transitive verbs, without obvious physical motion, and accompanies an abstract noun phrase. Consider example (2) again:

(2)	ta	jie-diao	le	nage	huai	
	xiguan					
	he	get rid of	Perf	that	bad	habit
	"He got rid of that bad habit."					

A bad habit is an abstract entity. The giving up of it is almost an undetectable. But how can we perceive its existence and disappearance? Also, from where does the habit disappear?

This has everything to do with our conceptual system. We experience many things, through sight and touch, as having distinct physical shapes and boundaries. We thus tend to project physical shapes and boundaries on them, conceptualising them as entities and imposing on them physical characteristics such as existence and disappearance, even though we can never really feel them with our hands or sense them with our eyes or nose (Lakoff and Johnson 1980).

Therefore, in this case, a habit is conceptualised as a physical entity. It can be done away with, fade out, and finally disappear from our conceptual domain as physical things do from the physical space. Thus, Type B seems to represent the final state of usually a non-physical action, i.e., an abstract entity being done away with and finally disappearing from one's conceptual domain.

### **1.3** Negative Evaluation on the Result

Type C V-*diao* denotes a somewhat negative evaluation on the result in question. It often co-occurs with verbs with negative connotation, such as *lan-diao* "rotten", *si-diao* "die", *shu-diao* "lose", and et cetera. However, its negative meaning does not seem to come from the preceding verb in every case. Consider the following instances (4) and (5):

(4)	binggan	ruan-diao	jiu	bu	hauchi	le	
	cookie	soften	PARTICLE	not	tasty	CRS	
	"Cookies wor	n't taste good it	f becoming soft				
(5)	cai	huang-diao	jiu	bu	xinxien	le	
	vegetable	yellow	PARTICLE	not	fresh	CRS	
	"Vegetables won't be fresh if they turn yellow."						

In (4) and (5), the words *huang* "yellow" and *ruan* "soft" do not themselves carry negative meanings, but the constructions clearly involve one's unfavourable attitude to the final state of vegetables and cookies. The constructional meaning, which carries negative attitude, cannot be gained from the compositional parts (Goldberg 1995), in this case, *-diao* and the verb preceding it. In the following sections, I shall examine the semantic change of *-diao*, and try to account for the emergence of the constructional meaning of V-diao.

### 1.4 Data and Methodology

Two main sources provide the examples of the expressions discussed in this research. The written source mostly comes from the Academia Sinica Corpus. The spoken source comprises the Taida Spoken Corpus, and another eight hours of data from Professor Lily I-wen Su. An approximate total of sixteen hours of conversational Mandarin is adopted to serve the purpose of this study.

### 2 Metaphorical Relation

It is argued that, when a grammatical meaning is derived from its source, there often exists a metaphorical relation between the two meanings (Sweetser 1990, Bybee, Perkins and Pagliuca 1994). Such semantic change takes place to serve certain functional end in grammar and discourse, as indicated by Heine, Claudi and

Hunnemeyer (1991:48):

We try to demonstrate that metaphorical transfer forms one of the main driving forces in the development of grammatical categories; that is, in order to express more "abstract" functions, concrete entities are recruited.

Similarly, Goldberg considers metaphor a mechanism to develop polysemous construction. Her study on the *way* construction indicates that metaphor be a plausible cause of semantic change, since it involves a "metaphorical self-created path" (1995: 203). This corresponds to my observation on V-*diao*: a metaphorical

transfer takes place when the construction proceeds from the physical domain to a conceptual domain, denoting metaphorical disappearance.

# 2.1 From Type A to B: Metaphor at Work

The above claim seems to be the case in the development of *-diao*. The meaning of Type A is the most concrete and physical, since it indicates a salient result after some physical action is carried out. Type B, on the other hand, denotes disappearance from our mental space instead of from the physical space. Now consider (6), a typical instance of such metaphorical transfer:

(6) a. ta	xiang	pao	keshi	pao-bu-diao		
He	think	run	but	run-not-away		
"He tried	to escape but	failed."				
b. zhuan	ge	shiwan		pao-bu-diao		
earn	PAR	TICLE a	hundred thousand	run-not-away		
"(Someone) should earn more than a hundred thousand dollars."						

Pao-bu-diao in (6a) denotes the unsuccessful outcome of the agent's escape.

The agent fails to escape and will not disappear. In (6b), it means that, the landmark "a hundred thousand" is certain to be met. However, not every single case of Type B has a counterpart in A. Actually, most Type B constructions do not. *Pao-bu-diao* is simply a case employed to illustrate the metaphorical relation between the two polysemous constructions. In most cases of type B constructions, the V slot is filled by less physical verbs, such as *jie* "get rid of" in (2), *hulue* "ignore", *wang* "forget", and so on.

### 2.2 Summary

In this section, I have shown that the physical "resultative compound" V-*diao* has undergone a metaphorical transfer, and develops the sense of disappearance from a conceptual domain. Thus, it makes perfect sense to speculate that the polysemy of the construction is at least partly contributed by metaphor, since disappearance is a common feature of Type A and B. This corresponds to the observation of Goldberg (1995). Figure 1 is representative of the mapping relation between Type A and B V-*diao*:

Type A (physical domain)	Тур	be B (conceptual domain)
disappearance of	mapping relation	disappearance of
physical shape		conceptual shape

# Figure 1 Metaphorical Transfer Between Type A and B V-diao

# **3** Pragmatic Inference

Other than metaphor, pragmatic inference is claimed to be a major mechanism of semantic change (Hopper and Traugott 1993, Bybee, Perkins and Pagliuca 1994). In such changes, context plays a crucial role. Frequent use of a grammatical or lexical

unit in a particular context may lead to the inference that the context is an incorporated part of its meaning. Goossens' research on Old English modals (1982) reports that, there were rarely "real" epistemic markers in OE, and that possibility markers frequently combined with adverbs to express epistemic functions. That is, speakers could have generalised and have extracted the epistemic meanings from the context and have imposed them on modals. This suggests that frequent co-occurrence with a particular context may "colour" the semantics of a gram.

It is highly likely that the final stage of development of V-*diao* is based on such mechanism. I have argued for the existence of the constructional meaning in 1.3. Now let us see how language use and context collaborate to lead to the constructional meaning in this case.

# **3.1** From Type B to C: Emergence of Constructional Meaning

In Type C construction, the sense of disappearance retains, but there seems to be something more than the combination of the verbal sense and disappearance. In general, these constructions involve undesirable assessment from the speaker. That is, the speaker obviously does not favour the consequence of the change of state.

It is noteworthy that Type C constructions can be further divided into two subtypes by the verbs in the V slot: 1) Verbs with negative connotation, such as *lan* 

"rot", *si* "die", *po* "break", *shu* "lose", and so on. 2) Neutral verbs, such as *huang* "yellow", *ya* "croak", *ruan* "soft", and so on. This classification highly pertains to the emergence of constructional meaning. Let us see how.

Initially, only the former constructions are formed. They simply denote a metaphorical disappearance, labeled Type B. As frequency of use increases, speakers tend to associate the construction with the adverse image. Such frequent collocation of verbs and the suffix may invite the inference that the constructions are used to express one's unfavourable appraisal of the situation at issue. The context is thus "semanticized" (Hopper and Traugott 1993:75), and becomes an integral part of the construction. Consequently, the construction may accommodate neutral stative verbs in the V slot and still gain a negative interpretation. See (4) and (5) again for illustration:

(4)	binggan	ruan-diao	jiu	bu	hauchi	le		
	cookie	soften	PARTICLE	not	tasty	CRS		
	"Cookies won't taste good if becoming soft."							
(5)	cai	huang-diao	jiu	bu	xinxien	le		
	vegetable	yellow	PARTICLE	not	fresh	CRS		
			f they turn yello					

"Yellow" and "soft" themselves do not signal any adversity. The adverse meaning is subtly signalled and triggered by the frequent occurrence of negative verbs in the construction. In other words, the constructional meaning, i.e. speaker's negative attitude, derives neither from the suffix denoting disappearance nor the verb

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preceding it, but could have been generalised from the constant collocation of negative words and *-diao*. Now even neutral verbs may fit into the V slot and indicate negative assessments.

### 3.2 Summary

Pragmatic inference is one of the driving forces of semantic change, and I have proven that it is at crucial play in the development of V-*diao* construction as well. First only verbs that result in physical and conceptual disappearance may occur in the construction. Then a group of verbs with negative connotation prompts a deduction of constructional meaning. Consequently, the negative sense of the verbs has transferred onto the entire construction, and the constructional meaning is drawn: the speaker's undesirable appraisal of the result. The following figure illustrates the development path from Type B to C:

Type BType Cnegative meaningmeaning has transferredcomes from context----->onto the construction

### semanticization of context

## Figure 2 Semanticization of Context and Emergence of

# **Constructional Meaning**

# 4 Conceptual Structure and Selectional Restriction

As the construction develops its polysemy, it comes be used in increasingly wider contexts. At the beginning it only accommodates physical verbs and denotes physical disappearance. It further proceeds to tolerate less physical verbs and metaphor allows a sense of conceptual disappearance. Finally, it may apply to a variety of stative verbs to express speaker attitude. Nevertheless, in spite of its seemingly free occurrence, some restriction still exists. Consider the following pairs for illustration:

(7)	a. wo	zhengge	ren	sha-diao	le
	Ι	entire	person	stun-Suffix	CRS
	"I was entirel	y stunned."			
	b. *wo	congmir	ng-diao	le	
	Ι	smart-Su	uffix	CRS	
(8)	a. dongxi	langfie-o	liao	le	
	thing	waste-Si	uffix	CRS	
	"The thing is	wasted."			
	b. *dongxi jenxi-diao		le		
	thing	cherish-	Suffix	CRS	

From the above pairs, it is evident that the V slot does not allow verbs with

positive connotation. It seems that the semantics of positive verbs clashes with that of the entire construction. Why is this the case? What is basis of such selectional restriction?

#### 4.1 Metaphorical Basis of Selectional Restriction

Previous studies on Mandarin -*qilai* constructions claim that the development of grammatical units cannot contradict the metaphor that they are based on, and that the collocation of -*qilai* and verbs are conceptually restricted on a semantic basis (Chang 1994, Huang and Chang 1996). My following observation on V-*diao* corresponds to this claim.

I have argued for metaphor as the driving force of semantic change from Type A to Type B V-*diao*. Further, this metaphorical transfer obeys the orientational metaphor GOOD IS UP; BAD IS DOWN (Lakoff and Johnson 1980:16):

Physical basis for personal well-being: Happiness, health, life, and control– the things that principally characterize what is good for a person– are all UP.

The physical and experiential basis for DOWN IS BAD is also evident in our language use and conceptual system. Syncronically, the most basic meaning of *diao* is physical dropping / falling and involves downward movement. It follows that *diao* can relate to something bad in our conceptual system. Be it grammaticalised or not, *diao* should never override the conceptual restriction to modify something good. In other words, if the metaphor DOWN IS BAD is truly at work in the emergence of the construction, it seems rather natural for the construction not to accommodate a verb with positive connotation. Thus, conceptual / cognitive restriction can fully account for the intrinsic incompatibility of positive verbs in V-diao construction.

The above semantic restriction is critical in the development from Type B to C V-*diao*, and without it, the rise of constructional meaning would be impossible. The constructional meaning is language users' generalisation from a previous existing pattern. The constraint must have existed prior to the formation of constructional meaning. Otherwise, without such a selectional restriction, the construction would fail to emerge, since positive verbs would intervene. Therefore, it is justified to say that this constraint metaphorically shapes, or at least helps to shape, the constructional meaning.

### 4.2 Summary

In this section, the incompatibility of positive verbs and *-diao* is closely examined from a semantic viewpoint. The meaning of *diao* metaphorically constrains the verb types it co-occurs with, which proves the metaphorical nature of our conceptual system. Also, such selectional restriction results in the emergence of constructional meaning. The metaphorical condition on constructional meaning thus reflects the interaction between grammar and human conceptual system.

# 5 Conclusion

In this study, I have classified V-*diao* constructions according to their semantics, and have explained the constructional meaning. In the second section, metaphorical transfer is argued to be an important mechanism in the development of the construction. Furthermore, I have discussed how pragmatic inference enables language users to arrive at the constructional meaning. Figure 2 shows the different stages of V-*diao* construction and their change of mechanism.

Finally, a selectional restriction on the V slot exists. The exclusion of positive verbs is conceptually conditioned by the semantics of *diao*. This suggests, the semantic change and grammaticalisation process of a grammatical unit, or a construction, is conditioned by human physical and experiential basis. Hopefully, this study may serve as a valid argument for the interaction of our language use and grammar, and the conceptual basis of human language.

TYPE ATYPE BTYPE Cphysical(metaphor)conceptual(inference)negative evaluation

Figure 3 Development of V-diao and Change of Mechanism

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