Metaphorical Transfer and Pragmatic Strengthening\textsuperscript{1}: 

On the Development of \textit{V-diao} in Mandarin

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Abstract

In this synchronic study, I shall adopt a corpus-based approach to investigate the semantic change of \textit{V-diao} in Mandarin. Semantically, \textit{V-diao} constructions fall into three categories:

A) Physical disappearance from its original position, with the \textit{V} slot filled by physical verbs, such as \textit{tao-diao} “escape,” \textit{diu-diao} “throw away,” and so on.

B) Disappearance from a certain conceptual domain, rather than from the physical space, with the \textit{V} slot filled by less physically perceivable verbs, such as \textit{jie-diao} “quit,” \textit{wang-diao} “forget,” and the like.

C) The third category of \textit{V-diao} involves the speaker’s subjective, always negative, attitude toward the result. Examples include: \textit{lan-diao} “rot,” \textit{ruan-diao} “soften,” \textit{huang-diao} “yellow,” and so forth.

It is claimed in this paper that the polysemy between types A and B is motivated by metaphorical transfer [Sweetser, 1990; Bybee, Perkins and Pagliuca, 1994; Heine, Claudi and Hunnemeyer, 1991]. Based roughly on Huang and Chang [1996], I demonstrate that a cognitive restriction on selection of the verb will cause further repetitive occurrence of negative verbs in the \textit{V} slot. Finally, I shall claim that pragmatic strengthening [Hopper and Traugott, 1993; Bybee, 1994].

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Perkins and Pagliuca, 1994] contributes to the emergence of unfavourable meaning in Type C.

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

**Keywords**: metaphorical transfer, pragmatic strengthening, conceptualization.

1. Semantic Classification of V-\textit{diao}

\textit{V-diao} is traditionally termed a resultative compound, indicating the result of an action [Li and Thompson 1981]. However, a close examination of linguistic data indicates that the semantics of \textit{V-diao} cannot be calculated by simply putting its components together. In this paper, I shall focus on the semantics of \textit{diao} and try to tackle \textit{V-diao} at a lexical level to see whether such lexical analysis works.

The \textit{V-diao} construction comprises a verb (be it action or stative) and a verbal suffix -\textit{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) the speaker's subjective evaluation of the result of an event, as in (1)-(3), respectively:

(1) \begin{align*}
\text{ta qiaoqiao} & \quad \text{pao-diao} & \quad \text{le} \\
\text{he quietly} & \quad \text{run away} & \quad \text{CRS}
\end{align*}

"He ran away quietly."

(2) \begin{align*}
\text{ta jie-diao} & \quad \text{le} & \quad \text{nage huai xiguan} \\
\text{he get rid of} & \quad \text{Perf that bad habit}
\end{align*}

"He got rid of that bad habit."

(3) \begin{align*}
\text{diennau zuotien huai-diao} & \quad \text{le} \\
\text{computer yesterday break down} & \quad \text{CRS}
\end{align*}

"The computer broke down yesterday."

I shall begin this paper with a close look at the semantics of the foregoing types of \textit{V-diao}, especially the last one. This is because the Type C construction involves an intriguing phenomenon: interpretation of a negative result cannot be arrived at by directly adding the suffix -\textit{diao} to any verb. It is worth noting that, synchronically, the semantics of \textit{diao} denote a downward movement. It is, thus, reasonable to claim that the negative interpretation may derive from the human experiential basis of space.
1.1 Type A: Physical Disappearance

It is reported that a suffix in a resultative verb compound in Mandarin indicates the sequel 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. This kind of -diao is mostly affixed to easily perceivable physical action verbs such as pao "run," as in (1), diu "throw," shao "burn," and so on.

1.2 Type B: Disappearance from a Conceptual Domain

The second sort of V-diao also denotes 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 abandonment of it by the agent is almost physically undetectable. But how can one perceive its existence and absence? 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]. Further details concerning Type B and metaphorical transfer will be addressed in the next section.

In this case, a habit is conceptualised as a physical entity. It can fade out, can be done away with, and can finally disappear from our conceptual domain as physical things do from a 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, finally disappearing from one's conceptual domain.

1.3 Type C: Evaluative Function from the Speaker

Type C V-diao denotes a somewhat negative evaluation of the result in question. It often co-occurs with verbs with negative connotation, such as lan-diao "rot," si-diao "die," shu-diao "lose," etc. However, its negative meaning does not seem to come from the preceding verb in every case. Consider the following instances (4) and (5):
In (4) and (5), the words huang “yellow” and ruan “soft” do not themselves carry negative meanings, but the entire phrase clearly involve one’s unfavourable attitude toward the final state of the vegetables and cookies. In the following sections, I shall examine the semantic change of -diao and try to account for the emergence of its unfavourable interpretation.

1.4 Data and Methodology

Two main sources provide examples discussed to illuminate this search. The written source mostly comes from the Academia Sinica Corpus, with a complete tagging system. The spoken source comprises the Taida Spoken Corpus, together with another eight hours of transcribed data. The spoken part amounts to an entire length of sixteen hours of conversational Mandarin. In sum, we collected a total of one hundred and eighty-nine tokens of -diao, excluding its use as a main verb such as xiao-diao-da-ya (笑掉大牙), diao-tao (掉頭), and so on. Also, when our argument called for constructed examples, native speakers, inclusive of the author himself, were consulted.

Two interesting observations on the corpora are left unaddressed due to the limited scope of the current study. First, the approximate portion of main verbs is much higher in our written corpus than that in our spoken corpus (around 4:1). Second, the development of -diao seems to match the tendency of subjectification proposed by Traugott [1989, 1995]. However, these issues are not closely related to the current study and will, thus, be left out of this research.

2. Metaphorical Transfer

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 a semantic change takes place to serve a 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.

The above corresponds to my observations of V-diao: a metaphorical transfer takes place when meaning proceeds from the physical domain to a conceptual domain, denoting metaphorical disappearance.

2.1 From Type A to Type B: Metaphor at Work

The above claim seems to be verified in the development of -diao. The meaning of Type A is the most concrete and physical one, 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 a 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. zhuang ge shiwan pao-bu-diao
   earn PARTICLE 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 does not disappear. In (6b), the meaning is 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 of the polysemy between Type A and B. In most cases of Type B V-diao, 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 developed the sense of disappearance from a conceptual domain. Thus, it makes perfect sense to conclude that the polysemy in this case is at least partly contributed by metaphor, since disappearance is a common feature of Types A and B. The following figure indicates the mapping relation between Type A and Type B:
Type A (source domain)  

mapping relation  

disappearance of physical shape  

Type B (target domain)  

disappearance of conceptual shape  

Figure 1 Metaphorical Transfer Between Types A and B V-diao

3. Pragmatic Strengthening

Other than metaphor, pragmatic strengthening 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] indicates that there rarely are “real” epistemic markers in OE, and that possibility markers frequently combine with adverbs to express epistemic functions. That is, speakers can generalise and extract the epistemic meanings from the context and impose them on modals. This suggests that frequent co-occurrence with a particular context may “colour” the semantics of a grammatical unit.

In this section, I will demonstrate that the final stage of development of V-diao is based on such a mechanism. Now let us see how language use and context collaborate to produce semantic change in the case of V-diao.

3.1 From Type B to Type C: Semanticisation of Context

In Type C -diao, the sense of disappearance is retained, but there seems to exist something more than the combination of the verbal sense and disappearance. In general, these phrases involve unfavorable assessment on the part of the speaker. That is, the speaker obviously does not favour the change of state.

It is noteworthy that Type C can be further divided into two subtypes based on the verb 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 huan “yellow,” ya “croak,” ruan “soft,” and so on. This classification highly pertains to the semantic change addressed in the current research. Let us see how.

Initially, only the former combinations are formed. They simply denote a metaphorical disappearance, labeled Type B. As the frequency of use increases, the speakers tend to associate the construction with the adverse image related to negative verbs. Such frequent collocation of negative verbs and -diao may invite the generalisation that the suffix is applied to express one’s unfavourable appraisal of the situation at issue. The context is, thus, “semanticized” [Hopper and Traugott, 1993:75] and is transferred onto -diao. Consequently, the construction may accommodate neutral stative verbs in
the V slot and still gain a negative interpretation. See (4) and (5) again for the purpose of illustration:

(4) binggan ruan-diao jiu bu hauchi le
cookie soften PARTICLE not tasty CRS
“Cookies won’t taste good if they become soft.”

(5) cai huang-diao jiu bu xinxien le
vegetable yellow PARTICLE not fresh CRS
“Vegetables won’t be fresh if they turn yellow.”

Huang and ruan themselves do not signal negativity. The adverse meaning is subtly signalled and triggered by the repetitive occurrence of negative verbs in the position. In other words, the emergence of the speaker’s negative attitude derives neither from the suffix denoting disappearance, nor from the verb 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 yield negative assessment. However, no positive verbs may combine with -diao. Details of this co-occurrence restriction will be given in the next section.

3.2 Summary

Pragmatic strengthening is one of the driving forces of semantic change, and I have proven that it plays a crucial role in the development of V-diao as well. First, only verbs that result in physical and conceptual disappearance may occur in the construction. Among them, a group of verbs with negative connotation prompt the deduction of negative connotation. Consequently, the negative sense of the verb is transferred to the entire phrase, resulting in the speaker’s unfavorable appraisal of the result. The following figure illustrates the development path from Type B to Type C:

Type B
negative meaning
comes from the context

Type C
meaning is transferred
to diao

Figure 2 Semanticisation of the Context in V-diao

4. Conceptual Structure and Selectional Restriction

As the polysemy of V-diao develop, its use broaden to increasingly wider contexts. At first, it only accommodates physical verbs and denotes physical disappearance. It then proceeds to tolerate less physical verbs and metaphorically allows a sense of conceptual disappearance. Finally, it may be applied
to a variety of stative verbs to express the speaker’s attitude. Nevertheless, in spite of its seemingly free occurrence, some restrictions still exist. Consider the following pairs for the purpose of illustration:

(7) a. wo zhengge ren sha-diao le
   I entire person dumb-Suffix CRS
   “I was entirely stunned.”

   b. *wo congming-diao le
   I smart-Suffix CRS

(8) a. dongxi langfei-diao le
   thing waste-Suffix CRS
   “The thing is wasted.”

   b. *dongxi zhenxi-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 this selectional restriction?

4.1 Metaphorical Basis of Selectional Restriction

I have argued for metaphor as the driving force of semantic change in the development of V-diao. The metaphorical transfer discussed in section two must obey the orientational metaphor GOOD IS UP; BAD IS DOWN proposed by 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.

Also, C. R. Huang’s previous studies on Mandarin-qilai constructions indicate that the development of grammatical units cannot contradict the metaphor that they are based on, and that the collocations of qilai and verbs are conceptually restricted on a semantic basis [Chang 1994, Huang and Chang 1996]. The following observations concerning V-diao correspond to this claim.

The physical and experiential basis for DOWN IS BAD is also evident in our language use and conceptual system. Synchronically, the most basic meaning of diao is physical dropping / falling, signaling downward movement. It follows that diao can relate to something bad in our conceptual system. Whether it is 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, it seems
rather natural for V-diao not to accommodate a verb with positive connotation. Thus, the conceptual / cognitive restriction can fully account for the intrinsic incompatibility of positive verbs with V-diao.

The above semantic restriction is critical in the development from Type B to Type C V-diao; without it, later unfolding would be impossible. Language users generalise the negative meaning of -diao from a previous existing pattern. The constraint must have existed prior to the semanticisation of context. Otherwise, without such a selectional restriction, the meaning would fail to emerge, since positive verbs would intervene. Therefore, it is safe to say that this constraint metaphorically shapes, or at least partly contributes to, the semantic shift of V-diao.

4.2 Summary
In this section, the incompatibility of positive verbs with -diao has been explored from a semantic viewpoint. The meaning of diao conceptually constrains the verbs it co-occurs with, which proves the metaphorical nature of our conceptual system. Also, this selectional restriction results in the existing pattern, which in turn results in the negative meaning of -diao. This metaphorical condition, thus, reflects interaction between the grammar and conceptual system.

5. Conclusion
In this study, I have classified V-diao constructions according to their semantics. In the second section, metaphorical transfer has been proposed as an important mechanism involved in the development of V-diao. Further, I have discussed how pragmatic strengthening enables language users to arrive at the negative meaning of -diao. Figure 3 shows different stages of V-diao and the change of mechanism.

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

TYPE A -------------------------> TYPE B -----------------------------> TYPE C
Physical (metaphor) conceptual (strengthening) negative evaluation

Figure 3 Different Stages of V-diao and Change of Mechanism
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