Chapter 2

Literature Review

As we know, V-diao compounds are in the category of V-V compounds. In order to learn the position of V-diao compounds in the domain of V-V compounds, we will summarize some notable research on V-V compounds at first. Then three types of syntactic status (i.e. resultative complement, phase marker, and aspect marker) will be introduced in the second part of this chapter. As to the third part, several previous studies concerning post-verbal diao will be reviewed.

2.1 V-V Compounds

Being a member of V-V compounds, V-diao compounds must share certain characteristics with other V-V compounds. Consequently, to review some general studies on V-V compounds will give us a preliminary understanding of V-diao compounds. Chao’s (1968) study in verb-complement compounds, Li & Thompson’s (1981) study in verbal compounds, and Packard’s (2000) study in V1-V2 verbs will be briefed in the following.

2.1.1 Chao (1968)

Chao names V-V compounds verb-complement or V-R compounds. Based on their expandability, these compounds can be classified into three categories: solid V-R compounds, infixable V-R compounds, and expandable V-R compounds. A solid V-R compound permits neither infixes nor any other inserted element. For example, shuo-po ‘to tell explicitly’ cannot be expanded as shou de po ‘say can break’ or shou le po ‘say cannot break’. Infixable V-R compounds take no insertion except potential infixes de ‘can’ and bu ‘cannot’. For example, there is zuo-wan ‘to finish’, zuo de wan
‘can finish’, *zuo bu wan* ‘cannot finish’, but no *zuo guo wan* ‘do-ASP-finish’.

Expandable V-R compounds allow infixes as well as other insertion to form phrases. For example, *chi-bao* ‘to eat full’, *chi de bao* ‘can eat full’, *chi bu bao* ‘cannot eat full’, *chi de tai bao* ‘to eat too full’ are acceptable forms. In the case of V-*diao* compounds, we find that some of them are solid V-R compounds (e.g. *luan-diao* ‘to become disordered’), and some are infixable V-R compounds (e.g. *gua-diao* ‘to scrape off’).

### 2.1.2 Li & Thompson (1981)

Li & Thompson divides verbal compounds into two kinds: the resultative verb compound and the parallel verb compound. These two kinds of compounds are both composed of two elements. “If the second element signals some result of the action or process conveyed by the first element,” it is a resultative compound; if the two elements are “of the same syntactic category” and are “synonymous or nearly synonymous or similar in meaning,” it is a parallel compound.³

The result the second element of a resultative verb compound can express may be cause (e.g. *la-kai* ‘to pull something open’), achievement (e.g. *xie-qingchu* ‘to write something clearly’), direction (e.g. *pao-chulai* ‘to run out’), and phase (e.g. *yong-wan* ‘to use up’). Post-verbal *diao* belongs to the kind that expresses phase. Resultative verb compounds have three important characteristics. The first one is they can occur with the potential infixes *de* ‘can’ and *bu* ‘cannot’. For instance, *da-kai* ‘to open’ can have potential forms such as *da de kai* ‘can open’ and *da bu kai* ‘cannot open’. The second one is they cannot be reduplicated. For instance, we cannot say *da kai da kai* ‘hit open hit open’. The third one is “except for directional verbs, no aspect

³ The syntactic category refers to adjectival verbs, action verbs, verbs of perception, and so forth.
markers, measure words, or any elements other than the potential infixes de and bu may intervene between the two constituents.” For instance, da le kai ‘hit-ASP-open’ is not a well-formed compound.

2.1.3 Packard (2000)

According to the way the meaning of a V₁-V₂ verb produces, Packard classifies five kinds of complex verbs. In the first kind of complex verbs, V₁ and V₂ are synonymous, and the gestalt verb represents the synonymous meaning, e.g. yue-du ‘to read.’ In the second kind of complex verbs, V₁ and V₂ have different meanings, and the meaning of the gestalt verb is the combination of the meaning of V₁ and V₂, e.g. zhuīqiú ‘to seek and pursue.’ In the third kind of complex verbs, V₁ and V₂ have different meanings, but the gestalt verb represents a “larger, superordinate” meaning, e.g. huxi ‘to breathe.’ In the fourth kind of complex verbs, V₁ modifies V₂, and the gestalt verb is a subclass of V₂, e.g. feixing ‘to fly.’ In the fifth kind of complex verbs, V₂ modifies V₁, and the gestalt verb is a subclass of V₁, e.g. feiwu ‘to flutter.’

Resultative complex verb is a well-known type of V₁-V₂ word. The V₁ of resultative verbs are generally acted by free and transitive verbs, while the V₂ are often acted by stative verbs. Packard distinguishes three classes of resultatives by the nature of V₂. The first class is stative resultatives, in which V₂ is a stative verb. The arguments of the V₂ in stative resultatives have to percolate to the gestalt verb. The second class is directional resultatives, in which V₁ is any verb of motion and V₂ is a verb of directional motion. The arguments of the V₂ in directional resultatives also have to percolate to the gestalt verb. The third class is attainment resultatives which have a “rather large, but nonetheless closed class” of V₂, including dao ‘to arrive’, wan ‘to finish’, zhu ‘to firmly stay’, jian ‘to perceive’, guo ‘to pass’, de ‘to obtain’,
kai ‘to open’, diao ‘to go away’, zhao ‘to attain’, dong ‘to understand’, hui ‘to be able to’, dong ‘to move’, lai ‘to come’, cheng ‘to turn into’, and guan ‘to be accustomed to’. Different from stative and directional resultatives, the arguments of the V2 in attainment resultatives do not always percolate to the gestalt verb.

2.2 Three Types of Syntactic Status

The syntactic status of post-verbal diao is one of the issues we will concentrate in the present study. For an easy access to our latter discussion, it is necessary to introduce some basic concepts of three types of syntactic status: resultative complement, phase marker, and aspect marker.

2.2.1 Resultative Complement

There are two senses when it comes to resultative complements. In the broad sense, a resultative complement is a verb that goes after another verb to form a compound; in the narrow sense, it is a verb that not only goes after another verb to form a compound but also specifies the result of the action conveyed by its preceding verb. The sense we adopt in this study is the latter one.

The selection restriction of acting as a preceding verb and a complement is the first question linguists encounter when doing research on resultative verb compounds (i.e. RVCs). Chao (1968) observes that “almost any verb” can be a preceding verb, and “a larger proportion of adjectives than of action verbs” can be a resultative complement. Gu (1992) notes “transitive verbs and unergative verbs can all act as V1,” and verbs that having the properties of “being non-volitional and being capable of expressing changes of states” can act as resultative complements.

The second most widely studied question is the argument structure of RVCs.
Chang (1989) argues that the argument structure of RVCs is largely a percolation of the theta roles of the preceding verb to the RVC, subject to coindexing restrictions. Nonetheless, Ross (1990) and Packard (2000) both state that the argument structures of RVCs are usually “a straightforward composite” of the argument structures of the preceding verbs and resultative complements.

Another popular question in recent years is the functions of resultative complements in Aspectual system. Both Yong (1997) and Kang (1999) point out a resultative complement adds an endpoint or goal to an Activity situation and thus change the original Aktionsart.4

2.2.2 Phase Marker

Cheng (1997) explains the concept of phase as follows: when event time interacts with speech time or reference time, it may present the whole event or a phase of it. That is, the speaker may lead the hearer to a particular phase of an event, for example, the beginning, the middle stage, or the end of the event, which is called situation by Vendler (1967). A phase markers is one of the elements that can express the phase of event.

Tang, Tang & Qiu (1997), a study on aspect markers and phase markers in Taiwan Southern Min, concludes the characteristics of phase markers in the following.

(i) The relation between a phase maker and a verb is closer than that between an aspect marker and a verb or that between a sentential particle between a verb. As a result, a phase marker often appears before an aspect marker or a sentential particle.

(ii) To express the ability or the inability, in Mandarin the potential forms de ‘can’ and

4 Aktionsart is a German word, meaning ‘kind of action.’ It is an indication of the inherent lexical aspect of a verb. (Kang 2001)
bu ‘cannot’ are allowed to insert between a phase marker and a verb.

(iii) When co-occur with a compound composed of a phase marker and a verb, an objective noun can appear either before it or after it.

(iv) A verb+object compound can take the verb again with a phase marker.

2.2.3 Aspect Marker

Aspect markers are the suffixes denoting the aspect of a situation. Aspect is the ways of viewing a situation: they may be complete or incomplete. By examining several phase markers in Taiwan Southern Min, Lien (1995) propose some criteria to distinguish aspect markers from phase markers.

(i) When a phase marker and an aspect marker appear after a verb at the same time, the former has to be placed before the latter.

(ii) The amount of phase markers is more than that of aspect markers.

(iii) Aspect markers co-occur with much more verbs than phase markers do.

(iv) Phase markers bear both lexical and grammatical meanings, whereas aspect markers bear only grammatical meanings.

(v) Aspect markers are more grammaticalized than phase markers.

(vi) From the perspective of lexical phonology and morphology (Kiparsky 1982), phase markers are formed at the lexical stratum, not productive, and have several similar morphemes to compete with; while aspect marker are formed at the post-lexical stratum, very productive, and have no similar morphemes to compete with.

(vii) Phase markers are at the level of morphology and are derivational morphemes, while aspect markers are at the level of syntax and are inflectional morphemes.
2.3 Previous Studies on Post-verbal *Diao*

There are few works probing post-verbal *diao*: Pu (2000) and Lu (2001), which are journal papers, focus on post-verbal *diao*, and Chen (2003), which is a dissertation, explores *diao* from the status as a verb to a phase marker. These three works on post-verbal *diao* are briefed as follows.

2.3.1 Pu (2000)

This is a descriptive work on post-verbal *diao*; the author describes its syntactic behavior in this paper. The author first deals with the co-occurrence of verbs and *diao*, and points out that *diao* can only combine with free, one-morpheme, dynamic verbs that have [+ disappear] or [+ cause to disappear] semantic attribute. According to the author’s classification of verbs, some bound verbs (e.g. *die* ‘to fall’), some two-morpheme verbs (e.g. *shangshi* ‘to lose’), and some state verbs (e.g. *feng* ‘to be insane’) are actually allowed to combine with *diao*. Moreover, the author does not demonstrate how to detect [+ disappear] and [+ cause to disappear] semantic attributes.

Following the record in Xiandai Hanyu Cidian [The Modern Chinese Dictionary], Pu assumes the grammatical category of post-verbal *diao* to be complement without making any arguments to support this statement. Fortunately, the author is aware of the distinction between the semantic content and the grammatical function, and thus particularly indicates that the meaning of post-verbal *diao* is *xiaoshi* ‘to disappear’. The author further explains that this meaning comes from the extension of the meaning of the full-fledged verb *diao* ‘to fall’. At the end of this paper, post-verbal *diao* is compared with several complements which also indicate ‘to disappear’ (i.e. *mo*).

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5 Since the author of Pu (2000) is from Mainland China, the difference in the co-occurrence of verbs and *diao* may result from the divergence between Mainland Mandarin and Taiwan Mandarin.
A notable contribution of this work is the report of different usages of post-verbal *diao* from the northern people and the southern people in Mainland China. This report depicts the phenomenon that the southern people in Mainland China use post-verbal *diao* more frequently and more colloquially than the northern ones, which cannot be observed in Taiwan. Although this study has many problems, it is still of importance because it is the very first paper concentrated on post-verbal *diao*.

### 2.3.2 Lu (2001)

In this work, post-verbal *diao* is investigated from the perspective of cognitive semantics. Because he is conscious of different semantic contents of post-verbal *diao*, the author attempts to reveal the underlying mechanisms responsible for this.

At first, according to their semantic content, V-*diao* compounds are classified into three types: A) physical disappearance, B) disappearance from a conceptual domain, and C) evaluative function from the speaker. In type A, *diao* signals the physical absence of agent or patient and is usually attached to physical action verbs, e.g. *tao-diao* ‘to escape’, *diu-diao* ‘to throw away’, and so on. In type B, *diao* represents the disappearance of abstract entities (e.g. habits) as the result of its preceding verbs, and is often attached to low transitive verbs, e.g. *jie-diao* ‘to quit’, *wang-diao* ‘to forget’, and so on. In type C, *diao* denotes the negative evaluation of the result, and frequently attached to verbs with negative connotation, e.g. *lan-diao* ‘to be rotten’, *ruan-diao* ‘to soften’, and so on.

This first part seems perfect, yet discloses certain defects. To take a close examination, it is not hard for us to perceive the problem of the way the author
classifies post-verbal *diao*. For example, according to the author, *chui-diao* ‘to blow off’ and *shao-diao* ‘to burn down’ are both classified in type A, for *chui* ‘to blow’ and *shao* ‘to burn’ are easily perceivable physical action verbs. However, the meanings of *diao* in these two compounds are different.

(1) a. Yi zhen da feng chui-diao ta de mao-zi.
   one CL big wind blow-DIAO he POSS hat
   ‘A strong wind blew off his hat.’

   b. Feng chui, maozi diao.
      wind blow, hat DIAO
      ‘The wind blew, and the hat fell.’

(2) a. Ta shao-diao yi dong fangzi.
    he burn-DIAO one CL house
    ‘He burned down a house.’

   b. *Ta shao, fangzi diao.
      he burn, house DIAO

From these sentences, we can learn that *diao* in (7a) maintains much semantic content of verbal *diao*, namely ‘to be removed in a downward direction’, so (7b) is a well-formed sentence, whereas *diao* in (8a) has different semantic content from verbal *diao*, namely ‘to be removed’, and that is why (8b) is an ill-formed sentence. Since the meanings of *diao* in *chui-diao* and *shao-diao* are not identical, it is better not to classify these two compounds into the same semantic category.

The significant contribution of this study falls in the second part, where the author asserts that it is metaphorical transfer that accounts for the transition of the semantic content of *diao* from type A to B, and the emergence of type C can attribute
to pragmatic strengthening. In the end of this paper, the author adopts the conceptual constraints to illustrate why post-verbal *diao* is incompatible with positive verbs, such as *hao* ‘to be good’, *chiang* ‘to be strong’, *bang* ‘to be wonderful’, and so on.

### 2.3.3 Chen (2003)

The usages of verbal *diao* and complement *diao* are under close examination in this work. Different from the definitions in most of Mandarin Chinese dictionaries, the author argues the core meaning of verbal *diao* is *likai* ‘away’ rather than ‘to fall’ or ‘to lose’. When it comes to complement *diao*, the author again claims its core meaning as *likai* ‘away’. Moreover, the author shows that complement *diao*, being a phase marker, can co-occur with motion verbs, giving verbs, throwing verbs, mental verbs, disposal verbs, vanishing verbs, and changing verbs. Yet the definitions of these verbs are not given, and this causes a difficulty for readers to classify verbs that may go with *diao*. From the discussion of the combinations of *diao* and these verbs, the author declares all of V-*diao* compounds are Achievements, which is different from our observation. Our observation shows V-*diao* compounds may be either Achievements or Accomplishments. Please consider the following examples:

(9) a. Xiaogang chi-diao le pingguo.
    Xiaogang eat-DIAO LE apple
    ‘Xiaogang ate up the apple.’

(9) b. Xiaogang zai chi pingguo.
    Xiaogang PROG eat apple
    ‘Xiaogang was eating the apple.’

Chen regards (9a) as an Achievement, but we regard it as an Accomplishment. As we
know, an Accomplishment consists of a process and an endpoint. Sentence (9b) expresses the progressive aspect of (9a). Therefore, (9a) should be an Accomplishment rather than an Achievement.

Chen himself points out that one of the significant differences between phase markers and aspect markers is that the former permit potential forms de ‘can’ and bu ‘cannot’ to insert into the [V + phase marker] compounds, whereas the latter does not. In order to insist complement diao is a phase marker, Chen asserts expressions such as si bu diao ‘die cannot DIAO’, huai bu diao ‘broken cannot DIAO’, feng bu diao ‘crazy cannot DIAO’, and so on are acceptable forms, which is against our intuition of Mandarin Chinese. Furthermore, since de and bu present the ability and inability in achieving certain results, it is hard for these verbs which possess little agentivity to be compatible with them.

The contribution Chen makes to the investigation of diao can be concluded in two ways. First, he adopts “pragmatic inferencing” to account for the semantic change of diao from a verb to a complement. Second, he proposes two lexical conceptual structures for verbal diao and four conceptual structures for complements diao as (10) and (11) show below.

(10) a. [BECOME [x BE AT-y]]
   x = theme
   y = away (from the speaker or the object)

   b. [x EXPERIENCE [BECOME [y BE AT-x]]]
   x = source
   y = away (from x)
(11) a. \[\text{BECOME } x \ [\text{BE AT-} y \ \text{by} \ \{\text{walking/running/slipping/escaping/flying}\} ]\]
   \[x = \text{theme}\]
   \[y = \text{away (from } z (= \text{the speaker}))\]

b. \[x \ \text{MOVE} \ [\text{BECOME } x \ [\text{BE AT-} y]]\]
   \[\{\text{walking/running/slipping/escaping/flying}\} \ \text{diao}\]
   \[x = \text{theme}\]
   \[y = \text{away (from } z (= \text{the speaker}))\]

c. \[x \ \text{ACT-ON } y \ [\text{BECOME } y \ [\text{BE AT-} z]]\]
   \[\{\text{sending/giving/selling}\} \ \text{diao}\]
   \[x = \text{source/agent}\]
   \[y = \text{theme}\]
   \[z = \text{away (from } x \text{ to } w (= \text{the goal}))\]

d. \[\text{BECOME } y \ [\text{BE AT-} z]\]
   \[\text{diao}\]
   \[y = \text{theme}\]
   \[z = \text{feng ‘to be crazy’, luan ‘to be disordered’, sha ‘to be silly’, huang ‘to be yellow’}\]

\text{Diao is an intransitive verb in (10a), and a transitive verb in (10b). When occurring with an intransitive motion verb, the lexical conceptual structure of post-verbal \text{diao} is presented in (11a). If an intransitive verb, which goes with \text{diao}, is viewed as an unergative verb, the lexical conceptual structure would be (11b). (11c) illustrates the situation when \text{diao} co-occurs with disposal verbs, transactional verbs, and separating verbs. In (11d), \text{diao} occurs with state verbs.}

\text{Like Pu (2000) and Chen (2003), we will explore the semantic content and syntactic status of post-verbal \text{diao}. However, different from Pu and Chen, we think that post-verbal \text{diao} has not only one meaning and not only one syntactic status. We also make a semantic classification like Lu (2001) does, yet what we classify is}
post-verbal *diao* and what Lu classifies is V-*diao* compounds. Moreover, the criteria of classification we adopt are not the same with Lu, either. One point that all of the three previous studies and we agree is post-verbal *diao* is in the process of grammaticalization. Both Lu (2001) and Chen (2003) try to figure out the reason why *diao* enters grammaticalization, but we are more interested in proving *diao* as undergoing grammaticalization.