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PASSIVE OR MIDDLE? EXAMINING CHINESE RESULTATIVE V-V COMPOUND CONSTRUCTIONS FROM A SINO-SPANISH COMPARATIVE PERSPECTIVE¹

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Abstract: This study conducts a detailed examination of V-V resultative compounds (RVC) in Standard Mandarin Chinese within a neo-constructionist framework, highlighting their syntactic and semantic intricacies. The paper focuses on resultative structures where the V1 and V2 components correspond to different subjects, forming distinct RVC patterns that exhibit middle characteristics. Through a comparative analysis with Spanish anticausative structures, specifically the middle se constructions, the research maps Chinese RVCs onto Spanish middles, providing insights into the syntactic roles and behaviors of these compounds. The study confirms that Chinese RVCs have an anticausative nature similar to the Spanish middle se, where the subject often acts as the patient in narrowly--defined middles and can encompass a variety of dynamic roles in broadly-defined middles. By contrasting these structures with passive sentences, we reveal that the subject in middles is formed at the pre-syntactic level, unlike the implicit agent in passives sentences which arises through NP-movement. The findings not only refine the understanding of Chinese RVC structures but also enhance the pedagogical approach to teaching Spanish to Chinese speakers by clarifying syntactic parallels and differences between the two languages.

Keywords: Chinese resultative verb compounds, Middle constructions, Syntactic analysis, Spanish middle *se*.

INTRODUCTION

The resultative structure of Standard Mandarin Chinese (RVC) has consistently attracted significant linguistic interest. This study adopts a neo-constructionist framework to analyze V-V resultatives in Mandarin, focusing on their syntactic and semantic properties. Prototypical RVCs are characterized by a bisyllabic verb, with V1 denoting an action and V2 the resultant state. Each verb typically represents a distinct event, but the subject of V1 and V2 can coincide or differ.

(1)
a. *Zhangsan da-si-le Lisi*.
Zhangsan hit-die-ASP Lisi
'Zhangsan killed Lisi.'
b. *Zhangsan he-zui-le*.
Zhangsan drink-drunk-ASP
'Zhangsan got drunk.'

In (1a), V1 *da* ('hit') is transitive, causing the result *si* ('die') for NP2 (*Lisi*). In (1b), the same subject (*Zhangsan*) performs the action (*he*, 'drink') and experiences the result (*zui*, 'drunk'). These examples show that RVCs are either transitive or intransitive but not ambiguous in subject-object alignment.

Additionally, RVCs can exhibit dual behavior, functioning transitively or intransitively depending on the noun phrase (NP) alignment. For example:

- (2)
- a. Zhangsan qi-lei-le.

Zhangsan ride-tired-ASP

'Zhangsan rode himself tired.'

a' Zhangsan qi-lei-le liang-pi-ma.

Zhangsan ride-tired-ASP two-CL-horse 'Zhangsan rode two horses tired.'

b. Zhangsan xie-lei-le.

Zhangsan write-tired-ASP

'Zhangsan wrote himself tired.'

b'. Na-ben-shu xie-lei-le Zhangsan.

that-CL-book write-tired-ASP Zhangsan 'Writing that book made Zhangsan tired' c. Beizi da-sui-le.
Glass hit-broken-ASP
'The glass broke.'
c. Zhangsan da-sui-le beizi.
Zhangsan hit-broken-ASP glass
'Zhangsan broke the glass.'

In (2c) and (2c'), the object NP (*beizi*, 'glass') in the transitive form becomes the subject in the intransitive form, a hallmark of anticausative structures. Previous research (e.g., Cheng & Huang 1995; Ting 2006) suggests that such constructions possess middle-like characteristics, paralleling Spanish se constructions:

(3) El vaso se rompió.ART glass REFL break.3SG.PST'The glass broke.'

Both Spanish and Mandarin share intransitive structures with patient NPs but differ morphologically. Spanish uses the reflexive se, whereas Mandarin relies on syntactic reorganization without explicit markers. For example:

i. Inchoative: *Beizi sui-le*. ('The glass broke.')

ii. Anticausative: *Beizi da-sui-le.* ('The glass broke due to an external cause.')

iii. Passive: *Beizi bei da-sui-le.* ('The glass was broken.')

These distinctions emphasize the anticausative nature of RVCs, aligning with Spanish se. By clarifying the syntax of Chinese RVCs in relation to Spanish middles, this paper seeks to refine their classification and highlight implications for language teaching, particularly in second-language acquisition of Spanish.

Finally, building on research by Cheng & Huang (1995) and Ting (2006), we argue that middle constructions arise from pre-syntactic operations where the external argument is semantically active but syntactically suppressed (Ackema & Schoorlemmer 1993). This study examines these dynamics through a detailed

comparison of Chinese and Spanish middles. The structure of the paper is as follows: §1 outlines the syntax of RVCs, §2 distinguishes middle constructions from passives, and §3 presents a formal analysis of Chinese and Spanish middles.

RVC CONSTRUCTIONS IN CHINESE

This section examines RVC structures where the internal argument, rather than occupying the object position, functions as the grammatical subject without the passive morpheme *bei*. For instance:

(4)*Beizi da-sui-le.*Glass hit-broken-ASP'The glass broke.'

In (4), beizi 'the glass' serves as the direct object (DO) for the bisyllabic verb da-sui 'hitbroken'. Intriguingly, it ascends to the subject position, rendering the sentence intransitive, or more precisely, inaccusative. Given the absence of an explicit agent or cause and its potential interchangeability with the beimarked passive (as seen in 5), some scholars classify it as a "notional passive". They perceive it as a subtype of passives where bei is absent (cf. Huang 1987; Xu & Zhou 1997; Xing 1997; Y. Po-Ching & D. Rimmington 2015). Conversely, other researchers posit that this is a manifestation of a middle construction (cf. Cheng & Huang 1995; Ting 2006; Huang, Li, A., & Li, Y. 2009).

(5)*Beizi bei da-sui-le.*Glass pass hit-broken-ASP'The glass was broken.'

We argue that RVC structures like (4) are better characterized as anticausative/middle rather than passive.

THE PATIENT NP AS A GRAMMATICAL SUBJECT

To understand why RVC sentences like (4) are not passive, it is crucial to determine the syntactic role of the preverbal NP (*beizi*). In Chinese, subjecthood is inferred from position or interpretation, as there are no explicit morphological markers.

Two interpretations of *beizi* are possible:

1. Beizi 'the glass' acts as the subject, as in *bei*-passives.

2. *Beizi* 'the glass' is the direct object and has been fronted to serve as the topic, as seen in (6).

(6)

Na-ge-beizi, Zhangsan da-sui-le. That-CL-glass, Zhangsan hit-broken-ASP 'That glass, Zhangsan broke it.'

However, evidence suggests *beizi* in (4) is the subject:

Firstly, if *beizi* is the subject, the agent or cause cannot appear in the sentence, as each argument can only have one syntactic role. The ungrammaticality of (7) illustrates this:

(7) **Beizi Huan da-sui-le*. (if *beizi* is the subject)

Glass Juan hit-broken-ASP

If we assume that *beizi* is a DO, there would need to be a covert subject (*pro*), making *beizi* the topic:

(8)

a. BEIZI pro da-sui-le.

Glass pro hit-broken-ASP

'The glass, (someone/something) broke it.'

At first glance, this hypothesis seems plausible. However, topicalized NPs must be definite, as shown in (9):

(9)

a. Zhe-zhong-yu wo hen xihuan chi.This-kind-fish I really like eat'I really like to eat this kind of fish.'

a'. **Yi-zhong-yu wo hen xihuan chi*. One-kind-fish I really like eat. (Ting 2006: 93)

In contrast, the preverbal NP in RVC structures can be indefinite, as in (10):

(10)*Yi-ge-beizi da-sui-le.*One-CL-glass hit-broken-ASP'A glass broke.'

Thus, we hypothesize that the preverbal NP in RVC structures is the subject, similar to the NP in *bei*-passives (11a), rather than a topicalized object (11b):

(11)

a. Yi-ge-beizi bei da-sui-le.

One-CL-glass PASS hit-broken-ASP

'A glass was broken.'

b. *Yi-ge-beizi Huan da-sui-le.

One-CL-glass Juan hit-broken-ASP Intended reading: 'Juan broke a glass.'

In summary, in RVC sentences like (4), repeated here as (12), the preverbal NP is the subject, not a topicalized direct object:

(12) Beizi-SUBJECT da-sui-le.

CONSTRAINTS ON THE VERB

After delineating the syntactic function of the NP within the Chinese RVC constructions, this section will investigate its constraints on verbs. Can these structures be formed provided that V1 serves as the action executor and V2 for the theme? Put differently, can all the disyllabic verbs that satisfy this criterion undergo the alternation between intransitive and transitive just as (2c) and (2c')? The answer is an unequivocal no. Although the verb qi-lei 'ride-tired' in (2a) and (2a') and xie-lei 'writetired' in (2b) and (2b') fulfill this criterion, the theme NP (liang-pi-ma 'two horses', na-benshu 'that book') cannot emerge as the subject in the intransitive constructions, as shown in (13a) and (13b). In contrast, in Spanish, there

is no such phenomenon, and the theme NP can function as the syntactic subject in all three cases, as shown in (13a'), (13b'), and (13c'). What triggers this anomaly?

(13)

a. *Liang-pi-ma qi-lei-le.

Two-CL-horse ride-tired-ASP

Intended reading: 'Two horses are tired from riding.'

a'. *Dos caballos se cansaron mucho en el viaje.* two horse.PL REFL tire.3PL.PST a lot on the journey

'Two horses got very tired on the journey.'

b. *Na-ben-shu xie-lei-le.

That-CL-book write-tired-ASP

Intended reading: 'Writing that book was tiring.'

b'. Ese libro se escribió con mucho cansancio.

that book REFL write.3SG.PST with a lot of tiredness

'That book was written with a lot of tiredness.'

c. Beizi da-sui-le.

Glass hit-broken-ASP

'The glass broke.'

c'. El vaso se rompió.

ART glass REFL break.3SG.PST

'The glass broke.'

To explain this issue, first, we need to understand that the sentences shown in (2) (repeated below as 14) are different from each other.

(14)

a. Zhangsan qi-lei-le.

Zhangsan ride-tired-ASP

'Zhangsan rode himself tired.'

a' Zhangsan qi-lei-le liang-pi-ma.

Zhangsan ride-tired-ASP two-CL-horse 'Zhangsan rode two horses tired.'

b. Zhangsan xie-lei-le.

Zhangsan write-tired-ASP

'Zhangsan wrote himself tired.'

b'. Na-ben-shu xie-lei-le Zhangsan.

That-CL-book write-tired-ASP Zhangsan 'Writing that book made Zhangsan tired.' c. Beizi da-sui-le.
glass hit-broken-ASP
'The glass broke.'
c'. Zhangsan da-sui-le beizi.
Zhangsan hit-broken-ASP glass
'Zhangsan broke the glass.'

In Group A, the verb *qi-lei* 'ride-tired' has both transitive and intransitive usages. When it is used transitively, two semantic roles can be chosen: the subject of V1 is the agent *Zhangsan*, and the subject of V2 is the theme *liang-pi-ma* 'the two horses'; When acting as an intransitive verb, only one semantic role can be chosen, namely the agent *Zhangsan*; in this case, the subject of both V1 and V2 is the agent NP.

In Group B, the verb *xie-lei* 'writetired' can also be used both transitively and intransitively. As a transitive verb, *xie-lei* chooses a cause as the external argument, such as *na-ben-shu* 'that book' in (14b'), while the internal argument is the theme *Zhangsan*; when it is intransitive, the only argument is the patient *Zhangsan*. Compared to Group A, verbs in Group B require a patient, while those in Group A require an agent.

Verbs in Group C, like *da-sui* 'hitbroken', are different, choosing two semantic roles: agent/cause and theme/patient. In its transitive use, the agent/cause is assigned to the external argument, such as *Zhangsan* in (14c'), and the theme/patient is assigned to the internal argument, *beizi* 'the glass'; When used intransitively, the semantic role relationship remains the same, with the NP acting as the theme/patient moving to the subject position, similar to the mechanism of passive sentences.

Indeed, this phenomenon was also observed by Cheng & Huang (1995), who categorized resultative verb compounds (RVCs) into three types.

[_{RV} VI_{Acvite} [V2 _{state/Chango-of-State}]]: a <Agent> (unergative RVC) . b <Agent, Theme> (transitive RVC) c. <Agent, (Theme)> (mixed) (Cheng & Huang 1995: 198)

According to their categorization, Group A verbs fall under mixed RVCs, and Group C verbs are classified as transitive RVCs. However, Cheng & Huang (1995) did not include Group B verbs in their categorization. We can refine their categorization as follows:

> [_{RV} VI_{Acvite} [V2 _{state/Chango-of-State}]]: a <Agent> (unergative RVC) . b <Agent, Theme> (transitive RVC) c. <Agent, (Theme)> / < (Cause), Theme> (mixed RVC)

In this refined understanding of Cheng & Huang (1995)'s categorization, both Group A and Group B verbs are classified as mixed resultative verb compounds (RVCs). Examples of mixed RVCs include *he-zui* 'drink-drunk', *chi-bao* 'eat-full', and *ku-xing* 'cry-awake'. These verbs can function in both a transitive and intransitive manner, accommodating different semantic roles based on their usage.

On the other hand, Group C verbs are categorized as transitive RVCs. This group includes verbs like *ku-shi* 'cry-wet' and *chui-po* 'blow-broken', which inherently imply a cause-effect relationship between the action and the result. These verbs typically maintain a transitive nature, with a clear agent/cause and theme/patient relationship.

By incorporating this understanding into Cheng & Huang's classification, it becomes clearer why only certain RVCs can undergo the transitive-intransitive alternation without changing the argument structure. The categorization of verbs into mixed or transitive RVCs helps in predicting and explaining their syntactic and semantic behaviors in different contexts. In essence, Group C exemplifies a typical causative alternation, mirroring patterns seen in English (as in examples 15a and 15a') and Spanish (as in examples 15b and 15b').

(15)
a. John broke the glass.
a. The glass broke.
b. Juan rompió el vaso.
Juan break-3SG.PST ART glass
'Juan broke the glass.'
b'. El vaso se rompió.
ART glass REFL break-3SG. PST
'The glass broke.'

Up to this point, we have only discussed the RVCs in which V1 represents a light verb devoid of specific semantic content like the da'hit' in da-sui 'hit-broken' as an example, and V2 is a lexical verb. When da 'hit' serves as a lexical verb, it conveys the meaning "hit" and functions as a bi-argumental verb, as shown in (16).

(16)*Zhangsan da-le Lisi.*Zhangsan hit-ASP Lisi'Zhangsan hit Lisi.'

However, in bisyllabic verbs such as *dasui* 'hit-broken', *da-shi* 'hit-wet', *da-kai* 'hit-open', and so on, the verb *da* serves as a light verb, devoid of its original meaning 'hit'. Consequently, in these instances, Chinese, English, and Spanish can all employ the same structure to convey anticausative structures.

Apart from the cases where V1 is a light verb, Chinese also has a special situation compared to Spanish, where both V1 and V2 are lexical verbs in RVCs. An example is found in (17), *ku-shi* 'cry-wet', where two actions are contained within the same predicate.

However, Spanish encounters challenges in expressing the same semantic content in a similar manner and must resort to using adjuncts (as in *llorando* 'crying' in 17b') to describe the manner of *mojar* 'to wet'. (17)

a. *Zhangsan ku-shi-le shoupa*. Zhangsan cry-wet-ASP handkerchief

'Zhangsan cried the handkerchief wet.'

a'. Shoupa ku-shi-le.

Handkerchief cry-wet-ASP

'The handkerchief wet from crying.'

b. El pañuelo se quedó mojado porque Zhangsan lloró.

ART handkerchief REFL become wet because Zhangsan cry-3sg.pst

'The handkerchief got wet because Zhangsan cried.'

b'. El pañuelo se quedó mojado llorando.

ART handkerchief REFL become wet crying 'The handkerchief got wet because of crying.'

This phenomenon was observed early on by Talmy (1991; 2000). He introduced an important typological distinction in how languages express directed motion events. In simple terms, he proposed that languages can be categorized into two primary groups based on their treatment of motion events. Languages like Chinese and English typically convey the manner of movement through the main verb, while the path is indicated by a satellite attached to the verb.² These languages are known as "satellite-framed languages". In contrast, languages like Spanish and other Romance languages require the path to be integrated into the main verb, with the manner of movement expressed through adjuncts. These languages are referred to as "verb-framed languages".

As exemplified in (17), in Chinese, the main verb is *shi* 'wet', and the manner of action is V1 ku 'cry', both incorporated within a verb compound ku-shi. In Spanish, however, the way the handkerchief becomes wet from crying can only be expressed through an adjunct, as in *llorando* 'crying' in (17b').

The focus has now turned to identifying which RVCs in Chinese can undergo the causative alternation. The question arises as to why certain verbs like *da-sui* 'hit-broken' and *ku-shi* 'cry-wet' exhibit this alternation, while others like *tui-kai* 'push-open' in (18a') and *chui-huang* 'blow-get yellow' in (18b') do not.

(18)

a. *Zhangsan tui-kai-le men*.
Zhangsan push-open-ASP door
'Zhangsan opened the door.'
a'. **Men tui-kai-le*.
Door push-open-ASP
Intended reading: 'The door got open.'
a". *La puerta se abrió*.
ART door REFL open.3SG.PST

'The door opened.'

b. *Qiufeng chui-huang-le shuye*. autumn wind blow-yellow-ASP leaves 'The autumn wind has turned the leaves yellow.'

b'. *Shuye chui-huang-le.

Leaves blow-yellow-ASP

Intended reading: 'the leaves turned yellow from blowing.'

b". *Las hojas amarilleron/se ennegrecieron*. ART leaves turn yellow/REFL blacken 'The leaves turned yellow/blackened.'

This is closely tied to the semantic roles of EA of the verb. We have observed that verbs capable of forming anticausative constructions allow their EA to assume semantic roles as either agent or cause. In contrast, predicates that do not undergo the causative alternation can only assign a single semantic role to their external argument, which is either a cause or an agent. For example, *Zhangsan* in (17a) serves as an agent, while in (17a'), *Zhangsan* acts as a cause.

² As per Talmy (2003), a "satellite" refers to a relational element within the predicate verb's root, distinct from nouns or prepositional phrases. Typically, satellites are denoted by particles, affixes, or free words.

(19)

a. *Zhangsan guyi da-sui-le beizi*.
Zhangsan deliberately hit-broken-ASP glass
'Zhangsan deliberately broke the glass'
a'. *Zhangsan buxiaoxin da-sui-le beizi*.
Zhangsan accidentally hit-broken-ASP glass
'Zhangsan accidentally broke the glass.'

Nonetheless, solely an agent NP, like *Zhangsan* in (18a) qualifies as the EA of *tuikai* 'push-open'. Conversely, cause NPs such as *qiufeng* 'the wind' in (20a), are inadmissible. In a parallel manner, only 'the wind' can be attributed as the causative factor for turning 'the leaves' yellow; introducing an animate agent, like *Zhangsan* in (20b), compromises the coherence of the sentence.

(20)

a. *Feng tui-kai-le men.

Wind push-open-ASP door

Intended reading: 'the wind opened the door.'

b. *Zhangsan chui-huang-le shuye.

Zhangsan blow-yellow-ASP leaves

Intended reading: 'Zhangsan turned the leaves yellow by blowing on them.'

It should be noted that we are not the inaugural observers of this phenomenon. This observation has precedent in the scholarly community, with various researchers delineating pertinent theories (see Levin & Rappaport Hovav, 1995; Reinhart, 2000; Alexiadou et al., 2015). The "Underspecified External Argument Condition" introduced by Alexiadou et al. (2015) provides a compelling explanation for the described phenomenon.

UNDERSPECIFIED EXTERNAL ARGUMENT CONDITION (UEAC)

Those transitive verbs that cannot form anticausatives restrict their subjects to agents or agents and instruments and disallow causers.

(Alexiadou et al., 2015: 53)

RVC STRUCTURES: DISTINCT FROM PASSIVE CONSTRUCTIONS

Although RVC sentences and passive sentences appear superficially similar (as in 21a and 21b), we cannot simply assume that the former is derived from the latter by omitting the word bei, nor should we consider RVC structures to be passive constructions.

(21)
a. *Beizi da-sui-le*. **RVC**Glass hit-broken-ASP
'The glass broke.'
b. *Beizi bei da-sui-le*. **Passive**Glass PASS hit-broken-ASP
'The glass was broken.'

To elucidate this perspective, we must first comprehend the syntactic and semantic features of the passive sentences in Chinese.

PASSIVES WITH BEI

The most classical passive sentences in Chinese are formed with the word bei, encompassing the following two types.

(22)
a. *Zhangsan bei Lisi da-le*.
Zhangsan PASS Lisi hit-ASP
'Zhangsan was hit by Lisi'
b. *Zhangsan bei da-le*.
Zhangsan PASS hit-ASP
'Zhangsan was hit.'

In passive structures, *bei* functions as a non-lexical marker and is placed before the verb *da* 'hit' in (22) to indicate passivity. In (22a), the agent *Lisi* is present, while in (22b) the agent is not specified, but it is implied that someone hit *Zhangsan*.

Chinese passives usually incorporate the passive morpheme *bei*. In the first instance (22a), the passive is followed by a NP (the agent) and a VP; in the second case (22b), *bei* is directly succeeded by a VP, with the agent

being phonetically elided, yet its presence can be inferred based on sentence interpretation. In the words of Huang et al., it concerns an "agent not expressed but implied" (2009: 112). The first sentence type is termed the "long passive with *bei*", following the structure NP2+*bei*+NP1+VP; the second is the "short passive with *bei*", taking the form NP2+*bei*+-VP, where NP1 denotes the agent and NP2 the patient/theme.

Although passive sentences are divided into two types based on the presence or absence of NP1, they are essentially identical in terms of their lexical requirements.

From a semantic perspective, the Chinese bei bears similarities with the preposition por in the Spanish periphrastic passive (23), as both can introduce the agent. However, there are distinct differences between the two. In Spanish, the agent is introduced by a prepositional phrase (PP), whereas bei in Chinese is not a preposition (cf. Feng 1997; Ting 1998; Huang 2001; Deng 2003, 2004; Wu 1999; Xiong 2003; Huang, J., Li, A. & Li, Y. 2009) but exhibits the characteristics of a verb marker. Therefore, in Spanish, the agent cannot be omitted on its own without leaving behind a lone preposition (as in the example with Lisi in 23). In contrast, Chinese does not face this issue of stranded prepositions, and the short passive is a case in point (as in 22b).

(23)
Zhangsan fue golpeado por *(Lisi).
Zhangsan be.3sG.PST hit.PP by (Lisi)
'Zhangsan was hit by Lisi.'

Compared to English and Spanish, passive sentences in Chinese are much less frequently employed in both spoken and written language, mainly due to their often-negative connotations — a semantic constraint not observed in English and Spanish (Li & Thompson, 1981; Wang, 1985; Xu & Zhou, 1997; Po-Ching & Rimmington, 2015; Huang & Liao, 2017). (24)

Maria.

a. La carta fue escrita por María.
ART letter be.3SG.PSt write.PP. by Maria
'The letter was written by Maria.'
a.' Se vende casa.
REFL sell.3SG.PRES house
'House for sale.'
b. The report was reviewed by the committee.
c. *? Xin bei Maliya xie-le.
letter pass Maria write-ASP
Intended reading: 'the letter was written by

Examples in (24) show that both Spanish and English can use passive sentences to express neutral events. The two forms of passives in Spanish, whether periphrastic passive(24a) or reflexive passive (24a'), can be used to express meanings without negative connotations without any problem. The *be*-passives in English (24b) are the same. However, the same situation does not apply to Chinese passives; to express the same meaning of (24a), (24c) shows that *bei*-passives are quite unnatural here.

RVC STRUCTURES VS. BEI-PASSIVES

While the RVC structures closely mirror passive constructions, we contend that they are intrinsically distinct. There are three primary arguments to support this assertion.

Initially, the RVC structures neither incorporate the passive marker *bei* nor conveys a pronounced passive interpretation. It rather delineates a resultant state — for instance, in (25a) irrespective of its cause, 'the glass' broke. Conversely, passives with *bei* (25b) embed an implicit agent or cause, as exemplified by *Zhangsan* or *feng* 'the wind' in (25b). There is an interpretation difference between (25a) and (25b). When the passive marker *bei* is absent, the event described in the sentence is neutral. However, in the passive sentence, the speaker wants to convey a negative emotion. Clearly, 'the glass' being broken is bad news for the speaker. (25)

a. Beizi da-sui-le.

Glass hit-broken-ASP

'The glass broke.'

b. Beizi bei (Zhangsan/feng) da-sui-le.

Glass PASS (Zhangsan/wind) hit-broken-ASP 'The glass was broken (by Zhangsan/the wind).'

Consequently, one cannot deduce that the resultative structure stems from the passive construction by merely omitting the noun phrase following *bei*. Clearly, they possess distinct interpretations and are not interchangeably translatable.

Secondly, the RVC structures cannot incorporate the agent/cause directly, as shown in (7), repeated here as (26).

(26)

a. **Beizi Huan da-sui-le.* (if *beizi* is the subject) Glass Juan hit-broken-ASP

Intended reading: 'the glass was broken by Juan.'

b. *Beizi Huan da-sui-le.* Glass Juan hit-broken-ASP

'The glass, Juan broke it.'

When the agent *Huan* is present, the theme *beizi* 'glass' is inevitably shifted from the nominative to the accusative case (as seen when contrasting 26a with 26b). As a result, the structure morphs into a transitive form with the object positioned as the topic. However, *bei*-passives are quite tolerant to the addition of agentive/causative NP, meaning that the presence or absence of an agent does not change the nature of the sentence.

The ungrammaticality of (26a) precisely illustrates that in RVC sentences, the verb (ej. da-sui 'hit-break') is intransitive, whereas in passive sentences, it is used as a transitive verb. This is like the distinction between passive and middle constructions with *se* in Spanish.

(27)

- a. *El vaso se rompió*. (passive) ART glass REFL break.3SG.PST 'The glass was broken.'
- b. *El vaso se rompió*. (middle) ART glass REFL break.3SG.PST 'The glass broke.'

In (27), although the verb is *romper* 'break' in both cases, its nature changes depending on the interpretation. When used in a passive sentence (27a), *romper* 'break' is a transitive verb, requiring an agent to perform the action, although the agent can be omitted. In the middle construction (27b), *romperse* 'break' is intransitive, indicating that there is no object, and the action occurs by itself or automatically.

Thirdly, the RVC structures in Chinese lack, and indeed cannot encompass, an implicit agent (28a in contrast to the passive with *bei* in 28c). The only external argument permissible is the causative entity, exemplified by *feng* 'wind' or *Huan* 'Juan' in (28b).

a. *Beizi guyi da-sui-le.

Glass intentionally hit-broken-ASP

Intended reading: 'the glass was broken intentionally.'

b. Beizi buxiaoxin (bei Huan/feng) da-sui-le.

Glass accidentally (by Juan/the wind) hitbroken-ASP

'The glass was broken accidentally (by Juan/ the wind).'

c. Beizi guyi bei da-sui-le.

Glass intentionally PASS hit-broken-ASP 'The glass was broken intentionally.'

The ungrammaticality of (28a) illustrates that the RVC constructions lack an agentive characteristic; as such, they are incompatible with the agentive adverbs like *guyi* 'intentionally'. Its congruence with the adverb *buxiaoxin* 'unintentionally' in (27b) suggests that the NP post *bei* represents a cause rather than an agent³.

⁽²⁸⁾

³ While *Huan* possesses animate qualities, it does not intrinsically denote agency. In actuality, the transitive construction (*Huan da-sui-le beizi/*Juan hit-broken-ASP) is susceptible to dual interpretations: 1. Juan inadvertently fractured the glass; 2. Juan intentionally caused the fracture to the glass.

In conclusion, the RVC structures in Chinese are not passive constructions like *bei*-passives.

RVC CONSTRUCTIONS AS MIDDLE

Given that Chinese RVC structures are not passive, a reasonable explanation is that they are middle. After all, the fact that the object NP serves as the syntactic subject eliminates the possibility of an active construction. In this section, we will explore the middle features of the RVC structure and its syntactic composition. Specifically, Section 3.1 provides a brief introduction to the definition of the middle construction, while Section 3.2 presents the previous study, and in the end, Section 3 offers a syntactic analysis of Chinese RVCs and Spanish anticausative/middle se.

"MIDDLE CONSTRUCTIONS", A CONTENTIOUS CATEGORY

The term "middle" is widely used in linguistics but lacks a consistent definition, often encompassing both "voice" and "construction." The distinction between "middle voice" and "middle construction" is not always clear, leading to terminological ambiguity and variation across languages. Before discussing Chinese middle structures, it is necessary to clarify these terms.

In linguistics, "voice" refers to the relationship between a verb's arguments and their semantic roles, specifically indicating who performs and who receives the action (RAE & ASALE 2019).

The middle voice lies between active and passive voices, characterized by **affectedness** (where the subject is impacted by the predicate's action) and **reflexivity** (seen in languages like Greek and Sanskrit, which use distinct verb inflections for the middle voice) (Xiong 2017).

(29)

In Sanskrit:

a. Devadatta ka a kurute.

Devadatta-NOM mat-ACC make-SG.MIDDLE

'Devadatta makes himself a mat.'

In Modern Greek:

b. O náftis pu épese s tin θálasa

the-sailor.nom rel fall.3sg.act prep thesea.acc

arpáxθike apó to sosívio pu tu. ériksan.

grab.3rd.sg.mid prep the-lifesaver.acc rel 3sg.gen throw.act

'The sailor who fell into the sea grabbed the lifesaver that they threw to him.' (He clearly grabbed it for himself.) (Xiong 2017: 2)

In the examples, both *Devadatta* and *o* $n \dot{a} f t i s$ are subjects affected by the verbs *kurute* ('make') and $arp \dot{a} x \theta i ke$ ('grab'), demonstrating reflexivity through specific verb endings, a hallmark of the middle voice.

In summary, the middle voice is a morphological feature marked by verbal inflections in languages like Sanskrit and Greek, but the term has also been extended to similar features in other languages, including Spanish and Chinese.

Unlike the middle voice, the middle construction is more narrowly defined, primarily as a semantic term with syntactic attributes. It refers to cases where "the theme or patient of a verb is structurally realized as the subject of a predicate in an active voice" (Park 2009: 125). Semantically, such sentences often convey a sense of genericity.

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(30)a. This glass breaks easily.b. The car drives well.
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In (30), transitive verbs like *break* and *drive* have direct objects (*the glass, the car*) that function as subjects, reflecting specific properties such as fragility or ease of driving. Such structures are classified as middle cons-

tructions and have attracted significant scholarly interest. However, the narrow definition of middle constructions excludes many related structures, creating ambiguity. For instance, anticausative structures are often treated separately, with scholars preferring the term "anticausative" and avoiding references to voice relationships.

(31)

a. *The glass broke.*b. *Pedro se manchó sin darse cuenta.*Pedro REFL stain.3SG.PST without realize
'Pedro stained himself without realizing it.'

In constructions with intransitive verbs indicating a change of state, the subject serves as the semantic object of the predicate, with the agent or cause often omitted. These verbs remain in active form, distinguishing them from typical passives and aligning them with middle constructions, as defined in this article.

The representation of middle constructions varies across languages. In Spanish, they describe a subject that acts as both the initiator and endpoint of the process (Sánchez 2002), functioning as the affected object and lacking an agentive role. Spanish middle constructions are generally categorized into two main types.

1. Intrinsic middles formed by intransitive verbs ⁴ (32a) and pronominal verbs (32b).

2. Syntactic middles formed by the nonargumental *se*/middle *se* and causative verbs ⁵ (32b).

(32)

a. Esta puerta no (se) cierra bien.

This door no (REFL) close.3SG.PRES well

'This door doesn't close well.'

a'. Juan cierra la puerta.

Juan close.3SG.PRES ART door 'Juan closes the door.' b. *Me arrepiento*. PRON.1SG.REFL regret.1ST.SG.PRES 'I regret.' c. *Se secó al sol*. REFL dry.3SG.PST in.ART sun 'It dried in the sun.' (RAE 2009: §41.13, §41.14)

Sentences like (32c) are usually formed with verbs of change of state or position, which present the possibility of 'causative alternation' (Sánchez 2002: 80-81). As shown in (33).

(33)

a. El viento secó la ropa.

ART Wind dry.3SG.PST ART cloth

'The wind dried the clothes.'

a. La ropa se secó (con el viento).

ART cloth REFL dry.3SG.PST with ART wind 'The clothes dried (with the wind).' (Sánchez 2002: §3.2.1)

In (33a), the interpretation is causative, as the 'wind' initiates the drying process, and the 'clothes' (DO) undergo the change. In (33b), the direct object becomes the subject, with the external argument optionally expressed as an adjunct. Similarly, Spanish *se* structures, like English middle constructions, often require adjuncts or aspects to convey genericity.

(34)

Los bosques se queman fácilmente. ART forest REFL burn.3PL.PRES easily 'Forests burn easily.' (Mendikoetxea 1999: \$26.1.1.3)

When *los bosques* ('the forests') acts as the subject of the transitive verb *quemar* ('burn'),

⁴ In this context, we also encompass the intransitive utilization of certain transitive verbs, exemplified by verbs like *aumentar* 'increase' and *matar* 'kill', etc.

⁵ It is essential to differentiate sentences like (30b) from those formed by argumental *se* (e.g., *Se secó con una toalla* 'He dried himself with a towel'). There are two types of reflexive constructions: intrinsic reflexives (30b) and extrinsic reflexives (cf. Sánchez 2002). In the former, the particle *se* does not have a syntactic function, whereas in the latter, it does. For instance, the *se* in *se secó con una toalla* functions as a direct object: he dried himself with a towel. However, the *se* in (30b) is merely "a segment that is part of the lexical construction of the verb" (RAE 2009: §41.13f).

the clitic *se* helps it achieve a nominative position, while the adjunct *fácilmente* ('easily') conveys genericity. Because this structure resembles passive constructions with *se*, some linguists, such as Mendikoetxea (1999), classify them as "middle-passives." Similarly, "middle-impersonal" structures lack agreement between the NP and the predicate.

(35)

a. A los hijos no se les escoge.

To ART children no refl pron.3pl.10 choose.3sg.pres

'One does not choose his/her children.'

b. De las drogas se depende fácilmente.

pp. ART drugs REFL depend.3SG.PRES easily 'Drugs can be easily addictive.' (Mendikoetxea 1999: 1663)

Mendikoetxea (1999) distinguishes middle-passives from typical *se* passives and impersonals based on their generic aspect. She identifies three key differences:

i. Se passives denote a specific process or activity, while middle-passives express an object's property with a "modal value" (e.g., 'the forests' in (34) can burn easily, reflecting a quality rather than a completed event).

ii. Se passives typically have a specific (implicit) agent, whereas middle-passives involve a generic or universal agent (e.g., anyone burning the forests). This feature aligns middle-passives with middle-impersonals.

iii. Middle-passives often include a modal adverb (e.g., *fácilmente* 'easily' in (34)), which is absent in *se* passives.

We argue that this categorization overgeneralizes the term "middle," leading to terminological issues. For example, the impersonal sentence in (35) lacks an NP as a syntactic subject, which contradicts the requirements for middle constructions. Additionally, the syntactic subject in (34) corresponds to the conceptual object, meeting the criteria for *se* passives. Therefore, we agree with RAE (2009) and Sánchez Lopez (2002) that sentences like (34) and (36a) are reflexive passives. To make them true middle constructions, the clitic *se* must be removed, as shown in (36b).

(36)

a. Esta tienda se cierra a las ocho.

This store REFL close.3SG.PRES at ART eight

'This store gets closed at eight.'

b. *Esta tienda cierra a las ocho*.This store close.3sg.pres at ART eight 'This store closes at eight.'

Compared to Indo-European languages like Spanish and English, research on Chinese middle sentences is less extensive. Due to the lack of morphological markers, Chinese middle constructions often rely on lexical addition, and their nature sometimes requires interpretation (Hu 2019). Scholars generally follow a strict definition, viewing the semantics of middle structures as expressing an individual-level property inherent to the subject (Hu 2019). Since Sung (1994), syntactic research has primarily focused on verb modifiers, identifying five specific patterns shown in (37).

- a. *Zhe-ben-shu nian QILAI hen rongyi.* this-CL-book read QILAI very easy 'This book reads easily.'
- b. Zhe-ge-wenti hen HAO jiejue. this-CL-problem very easy solve 'The problem solves easily.'
- c. *Gelin tonghua RONGYI/NAN du.* Grimm fairy tale easy/difficult read 'It is easy/difficult to read Grimm's fairy tales d. *Zhe-ge-beizi da-DE-po.*
 - This-CL-cup hit-DE-break

'This cup is breakable.'

e. *Zhe-jian-yifu xi BU ganjing.* This-CL-coat wash NEG clean 'This coat cannot be washed clean.' (Xiong 2017: 12-14)

⁽³⁷⁾

In example (37), a morpheme that changes the sentence's nature to static is inserted between the transitive verb and the result adjective. However, it seems the morphemes inserted are not what form the middle construction. Instead, it depends on the RVC in the sentence. Although Xiong (2017)'s categorization is relatively detailed, there is still room for supplementation, such as adding the modal verb *neng* 'can' or the adverb *hao* 'well'.

(38)

- a. *Zhe-ben-shu NENG/HAO nian*. This-clF.-book can/well read 'This book is esay to read aloud.'
- b. *Zhe-ge-wenti NENG/HAO jiejue*. This-CLF-problem can/well solve 'This problem can be easily solved.'
- c. *Gelintonghua NENG/HAO du.* Grimm's fairy can/well read 'Grimm's fairies are easy to read.'
- d. Zhe-ge-beizi NENG/HAO da-po. this-CLF-glass can/well break-broken 'This glass can easily break.'
- e. Zhe-jian-yifu NENG/HAO xi-ganjing. This-CLF-cloth can/well wash-clean 'This piece of clothing can be easily cleaned.'

Therefore, merely listing verb modifiers cannot exhaust all the Chinese middle constructions. These sentence types, though diverse, share a commonality in their verb type, all indicating events with transitive verbs (with/without event-resulting morphemes), such as *xi-ganjing* 'wash-cleaned', *da-po* 'hit-broken', *jiejue* 'decide'. This corresponds to the broad middle construction definition we mentioned earlier. We have observed that these verbs bear a strong resemblance to bisyllabic verbs that are part of the anticausative construction. For clarity, compare (38) with (39).

(39)

a. *Zhe-jian-yifu xi-ganjing-le*. This-CLF-clothing wash-cleaned-ASP 'This piece of clothing is washed clean.'

- a'. *Zhangsan xi-ganjing-le zhe-jian-yifu*. Zhangsan wash-clean-ASP this-CLF-clothing 'Zhangsan cleaned this piece of clothing.'
- b. *Zhe-ge-beizi da-po-le*.
 This-CLF-glass break-broken-ASP
 'This glass broke'.
- b'. *Zhangsan da-po-le zhe-ge-beizi*. Zhangsan break-broken-ASP this-CLF-glass 'Zhangsan broke this glass.'
- c. *Zhe-ge-wenti jiejue-le.* This-CLF-problem solve-ASP
 - 'This problem is solved.'
- c'. *Zhangsan jiejue-le. zhe-ge-wenti*. Zhangsan solve -ASP this-CLF-problem 'Zhangsan solved this problem.'

This observation reinforces our view that the core of Chinese middle constructions lies in the lexical choice of the predicate. Modifiers like *qilai* primarily serve as syntactic tools to ensure sentence coherence. Following our broad definition, configurations like (39a), (39b), and (39c) with RVC structures are classified as Chinese middles. The next section will examine their syntactic structure in detail.

PREVIOUS RESEARCH ON CHINESE RVC CONSTRUCTIONS

According to our definition of middle construction, sentences in Chinese, such as those in (40), exhibit characteristics of this middle nature.

(40)

a. Beizi sui-le.

Glass break-ASP

'The glass got broken (on his own or for an unknown reason).'

b. Beizi da-V1-sui-V2-le.

Glass hit-V1-breakV2-ASP

'The glass broke (due to some external cause).'

c. Shoupa shi-le.

Handkerchief wet-ASP

'The handkerchief got wet.'

d. *Shoupa ku-V1-shi-V2-le.* Handkerchief cry-V1-V2-wet-ASP 'The handkerchief got wet from crying.'

The structures presented in (40a) and (40b), (40c) and (40d) bear a strong resemblance. However, the first employs the monosyllabic verb sui /shi, which means 'break' and 'wet', while the second uses the compound verb da-sui/ku-shi translating to 'hit-broken'/ 'crywet'. According to our definition of middle, both are middle constructions. Notably, while (40b) and (40d) are anticausative, (40a) and (40c) are not. In these sentences, the theme beizi 'the glass' and shoupa 'the handkerchief' function syntactically as the subject. The particle le is indicative of a perfective aspect and past tense. Their main distinction lies in the predicate: two different verbs are used. The verbs sui 'break' and shi 'wet' in the first sentence are intransitive and hence cannot have DO as shown in (39a') and (39b'), whereas da-sui 'hit-broken' and ku-shi 'crywet' in the second are causative alternation verbs (as referenced by Sánchez 2002) and are used transitively as seen in (41a) and (41b).

(41)

a. Zhangsan da-sui-le beizi.

Zhangsan hit-broken-ASP glass

'Zhangsan broken the glass (accidentally or intentionally).'

a'. *Zhangsan sui-le beizi.

Zhangsan broken-ASP glass

b. Lisi ku-shi-le shoupa.

Lisi cry-wet -ASP handkerchief

'The handkerchief got wet because Lisi cried.'

b'. *Lisi shi-le shoupa.

Lisi wet-ASP handkerchief

Sentences (40a) and (40c) are inchoative middle constructions. The main reason for this classification is that they lack an external argument. This means that in the events described by these sentences, there is no identifiable cause or agent initiating or controlling the action. Additionally, (40a) and (40c) aligns with adverbs that highlight the event's spontaneous nature, as seen with *ziji* 'on its own' in example (42a). However, pinpointing the exact nature of (40b) and (40d) is a bit tricky. It's incompatible with *ziji* 'on its own' as in (42b), and it doesn't pair well with intention-expressing adverbs like *guyi* 'deliberately' in (42b'). This suggests that structures like (40b) and (40d) are neither inchoative nor agentive.

(42)
a. *Beizi ziji sui-le*.
Glass itself broken-ASP
'The glass broke on its own.'
b. **Beizi ziji da-sui-le*.
Glass itself hit-broken-ASP
b'. **Beizi guyi da-sui-le*.
Glass deliberately hit-broken-ASP

Some scholars argue that in Chinese, only sentences accompanied by specific adverbs, like those in (37), are considered middle constructions. Conversely, they believe sentences like (40b) and (40d), which indicate a change in state, do not fit the bill (as per Xiong 2017). On the flip side, there are proponents, including Cheng & Huang (1995), Ting (2006), Huang et al. (2009), who classify them as a middle construction. Their reasoning offers intriguing insights.

Xiong (2017) contests the middle categorization of RVC constructions. He rigidly defines middle constructions as those that exclusively embody generic traits. Given that RVC structures portray a specific event, he does not see it as a middle construction. However, this interpretation is quite limiting. Following such a narrow definition would inadvertently exclude certain Spanish middle constructions like those in (43), which does not seem right.

(43)a. *La ropa se secó.*ART clothes REFL dry.3SG.PST'The clothes got dried.'

b. Pronto se arrepentirá de haber tomado esa decisión.

Soon REFL regret.3sg.FUT of have make.PP. that decision

'He will soon regret having made that decision.'

(Sánchez 2002: 73)

Clearly, sentences like those in (43) are not active. The reason being the subject – whether it is *la ropa* 'the clothes' in (43a) or the regretful individual in (43b) – functions as the theme or experiencer. Simultaneously, they do not fit the passive mold either, as there is no explicit agent driving the action. Hence, structures in (43) are best described as middle constructions. Their use of the perfective tense (e.g., *se secó* 'get dried' or *se arrepentirá* 'will regret') signifies a change of state without carrying generic characteristics. This leads us to argue that Xiong's (2017) definition might be too rigid.

Shifting focus, all of Cheng & Huang (1995), Ting (2006) and Huang et al. (2009) posit that RVC structures akin to (44a) are middle constructions.

(44)
a. Shoupa ku-shi-le.
Handkerchief cry-wet-ASP
'The handkerchief wet from crying.'
a. Zhangsan ku-shi-le shoupa.
Zhangsan cry-wet-ASP handkerchief
'Zhangsan cried the handkerchief wet.'

Cheng & Huang (1995) and Huang et al. (2009) suggest that the intransitive structure of (44a) hides an inherent transitive nature, as seen in (44a'). Owing to *de-thematization* rules, the agent, *Zhangsan*, becomes implicit, prompting the patient-NP *shoupa* 'handkerchief' to take on the subject role. Extending their analysis, Cheng & Huang (1995), drawing from Keyser & Roeper (1984), differentiate (44a) from the conventional unaccusative patterns, as seen in (45).

(45) *Zhangsan lei-si-le.* Zhangsan tire-die-ASP 'Zhangsan is overwhelmingly tired.'

In the perspective of Cheng & Huang (1995) and Huang et al. (2009), sentences echoing (44a) are termed as "surface ergatives", derived by suppressing the agent. In contrast, constructs like (45) are labeled "deep ergatives", given they retain their ergative nature, both at the inherent and apparent levels. To elucidate, in (44a), the subjects of V1 (*ku* 'cry') and V2 (*shi* 'wet') differ. However, in (45), both V1 (*lei* 'tire') and V2 (*si* 'died') share the same subject. This distinction becomes evident when juxtaposing (46a) and (46b): only the deep ergatives can transition to pure causativization, a transformation not permissible for surface ergatives.

(46)

a. *Zhe-jian-shi ku-shi-le shoupa. This-CL-thing cry-wet-ASP handkerchief
b. Zhe-jian-shi lei-si-le Zhangsan this-CL-thing tire-die-ASP Zhangsan 'This thing exhausted Zhangsan.' (Cheng & Huang 1995: 215)

We concur with Cheng & Huang (1995)'s and Huang et al. (2009)'s analysis to a certain extent, where RVC sentences like (44a) are treated as middle constructions. However, we also offer differing analyses.

First, we posit that the V1 subject is not an agent but a cause. While *Zhangsan* initiates the action ku 'cry', it does not necessarily designate him as the agent of the entire event. This is evident in (44a), reiterated as (47a), where one cannot use agentive adverbs. Moreover, introducing an agentive adverb into the transitive sentence feels awkward, as depicted in (47a').

(47)

a. Zhangsan ku-shi-le shoupa.

Zhangsan cry-wet-ASP handkerchief

'Zhangsan cried the handkerchief wet.'

a'. #Zhangsan guyi ku-shi-le shoupa.

Zhangsan intentionally cry-wet-ASP handkerchief

'He intentionally cried, thereby wetting the handkerchief.'

b. Shoupa. ku-shi-le.

Handkerchief cry-wet-ASP

'The handkerchief wet from crying.'

b'. *Shoupa guyi ku-shi-le.

Handkerchief intentionally cry-wet-ASP

One plausible interpretation is that subject *Zhangsan* in (47a) serves as the cause: his act of crying leads to the 'handkerchief' getting 'wet':

(48)

Ku-shi: [[Zhangsan-cry] CAUSES [handkerchief TO BECOME wet]]

Drawing a parallel, the compound verbs like *ku-shi* 'cry-wet' align closely with Spanish verbs denoting change of state or position, such as *secar* 'dry' or *hundir* 'sink' in (49).

(49)

a. El viento secó la ropa.

ART wind dry.3SG.PST ART clothes

'The wind dried the clothes.'

b. La ropa se secó (con el viento).

ART clothes REFL dry.3SG.PST (with ART wind)

'The clothes got dried (with the wind).'

Dry: [[x-DO] CAUSES [y TO BECOME DRY]]

(Sánchez 2002: 81)

A distinction here is that the Chinese verb comprises two morphemes: the first signifying a tangible activity (ku 'cry) and the latter indicating a state change (shi 'wet'). Meanwhile, in Spanish, *secar* is one verb, but its sublexical structure includes a light verb do, as shown in (49).

So, how does one rationalize the acceptability of (47a'), where *Zhangsan* aligns with the agentive adverb *guyi* 'intentionally'?

We suggest that transitive RVC sentences, such as (47a), allow dual interpretations. The subject can represent either the cause (50a) or the agent (50b).

(50)

a. *Zhangsan ku-shi-le shoupa*. (Here, *Zhangsan* denotes the CAUSE)

Zhangsan cry-wet-ASP handkerchief

'Zhangsan cried and therefore the handkerchief got wet.'

b. *Zhangsan ku-shi-le shoupa*. (Here, *Zhangsan* denotes the AGENT)

Zhangsan cry-wet-ASP handkerchief

'Zhangsan intentionally wet the handkerchief with his tears.'

Supporting our theory is the observation that in passive structures, the NP following *bei* can also represent both the cause (51a) and the agent (51b).

(51)

a. *Shoupa bei Zhangsan ku-shi-le.* (Here, *Zhangsan* is the cause)

handkerchief PASS Zhangsan cry-wet-ASP

'The handkerchief got wet as a result of Zhangsan's tears.'

b. *Shoupa bei Zhangsan ku-shi-le.* (Here, *Zhangsan* is the agent)

handkerchief PASS Zhangsan cry-wet-ASP

'The handkerchief was deliberately wetted by Zhangsan using his tears.'

The passive sentence's allowance for two semantic roles of the post-*bei* NP also proves that in the transitive RVC sentence (50), the subject *Zhangsan* can be either the cause or the agent, with the final interpretation depending on the context.

Challenging the perspective of Cheng & Huang (1995), Ting (2006) argues that the surface subject in Chinese active sentences is not derived from NP-movement but from base-generation. She bolstered this claim using intransitive V-*de* resultatives as evidence.

(52)
Youyou ku-de [Taotao bu neng gan huo].
Youyou cry-DE Taotao not can do work
'Youyou cried so much that Taotao couldn't do any work.'
(Ting 2006: 97)

When the verb is intransitive, the second NP, *Taotao*, is the subject⁶ of the verb. According to Ting (2006: 98-99), even though the subject of the embedded verb can be introduced by ba, it cannot form a middle construction. For instance, while the ba-construction permits NP-movement, the middle structure does not. Therefore, based on Ting's study, it can be inferred that the subject in the middle RVC structure is not generated through NP-movement but is formed through a presyntactic structure.

(53)

a. *Zhangsan ba yigebeizi da-sui-le.* Zhangsan BA a glass hit-broken-ASP 'Zhangsan broke a glass.'

b. *Yigebeizi da-sui-le ba Zhangsan.

a glass hit-broken-ASP BA Zhangsan

Following Ting (2006)'s perspective, we believe that the formation of the anticausative middle/RVC structure in Chinese occurs in the pre-syntactic phase of sentence generation. Although the middle structure lacks an explicit subject, there is indeed an implicit subject within it. Semantically, a Chinese middle RVC sentence contains two events: the first event occurs at the presyntactic level, while the second event is manifested syntactically. There is a clear causal relationship between these two events.

(54)Shoupa ku-shi-le.Handkerchief cry-wet-ASP'The handkerchief wet from crying.'

Event 1: Someone cried (this is the cause leading to the consequence).

Event 2: The handkerchief became wet (this is the result of the previous event).

It's worth mentioning a special type of these bisyllabic verbs whose V1 is *da* 'hit'. For example, DA-shi 'hit-wet', DA-kai 'hit-open', DA-sui 'hit-broken', etc.

(55)

a. Beizi (*ziji) DA-sui-le.

Glass (*by itself) hit-broken-ASP

'The glass broke (*by itself).'

a'. Zhangsan (guyi/buxiaoxin) DA-sui-le beizi.

Zhangsan (intentionally/accidentally) hitbroken-ASP glass

'Zhangsan broke the glass (intentionally/ accidentally)'

b. Men (*ziji) DA-kai-le.

Door (*by itself) hit-open-ASP

'The door opened (*by it self).'

b'. Zhangsan (guyi/buxiaoxin) DA-kai-le men.

Zhangsan (intentionally/accidentally) hitopen door

⁶ There are two types of V-*de* resultative structures. One is formed by transitive verbs (like *kua* 'praise'), and the other is formed by intransitive verbs (like *ku* 'cry').

⁽i) Youyou kua-de Taotao [pro buhaoyisi-le].

Youyou praise-DE Taotao embarrassed-ASP

^{&#}x27;Youyou praised Taotao so much that Taotao was embarrassed.'

When the verb is transitive, NP2 is the object of the verb *kua* 'praise', and not the subject of '*buhaoyisi* 'embarrassed'. One evidence is that only those involving an intransitive V-*de* allow wh-words to be fronted before the post-de NP. For example, (ii). *Youyou ku-de sheme shi Taotao dou bu xiang zuo.*

Youyou cry-DE what thing Taotao all not want do

^{&#}x27;Youyou cried so much that Taotao didn't want to do anything.'

⁽iii) *Youyou kua-de sheme shi Taotao dou bu xiang zuo.

Youyou praise-DE what thing Taotao all not want do

^{&#}x27;Youyou praised Taotao so much that Taotao didn't want to do anything.'

For details, please refer to Ting (2006), Y. Li (1997).

'Zhangsan opened the door (intentionally/ accidentally)'

c. Shoupa (*ziji) DA-shi-le.

Handkerchief (*by itself) hit-get wet-ASP 'The handkerchief got wet (*by itself).'

c'. Zhangsan (guyi/buxiaoxin) DA-shi-le shoupa.

Zhangsan (intentionally/ accidentally) hitwet-Asp handkerchief

'Zhangsan wet the handkerchief (intentionally/accidentally)'

The meaning of da is 'hit'. But in unaccusative sentences (55) it loses its original meaning and becomes a light verb (like the verb *hacer* 'do' in Spanish). What's special about this type of verb is that its V1 (da) loses part of its meaning and becomes a light verb that energizes the V2. Therefore, in the translation, da-shi 'hit-wet' corresponds directly to the causative verb *mojar* 'wet' in Spanish. But at the same time, da still retains the syntactic function of V1, that is, it takes care of the causative activity:

(56)

Ku-shi: [[x-KU 'cry'] CAUSE [y RESULT SHI 'get wet']] *Mojar* 'wet': [[x-DO SOMETHING] CAUSE [y RESULT wet]] DA-shi: [[x-DA 'do something'] CAUSE [y RESULT SHI 'wet']]

Moreover, when the adverb is different, the external argument *Zhangsan*'s semantic role also changes (if it were 'intentionally', *Zhangsan* would be the agent; if it were 'accidentally', *Zhangsan* is the cause).

A FORMAL ANALYSIS UNDER THE DISTRIBUTED MORPHOLOGY FRAMEWORK

Under the theoretical framework of Distributed Morphology (DM), syntax consists of a set of rules that generate syntactic structures, which are then subject to further operations in the derivation process at the interface levels of Phonetic Form and Logical Form. All words are formed through Merge and Move. The units performing these two syntactic operations are called morphemes and must be the terminals of a tree.

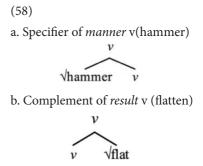
There are two types of morphemes. One is roots like \sqrt{vaso} 'glass' or \sqrt{romper} 'break', the other is abstract morphemes like [PL] or [PAST]. Roots cannot appear alone and must always be categorized by being in a local relationship with one of the functional heads that define categories (Alexiadou, et al. 2015).



(57)

From the viewpoint of DM, there cannot be a projection of lexical information to the syntactic component. Therefore, only functional structures can introduce arguments. Roots do not introduce the external argument, and there is no RootP. Alexiadou, et al. (2015) propose that the external argument is projected in the specifier of the VoiceP, the internal argument (IA) is legitimized by particles/prepositions/functional cores/small clauses.

They also classify verbs into two ontological categories, *manner* and *result*, which determine the relationship between the meaning of the verb and the event structure. Thus, there are two types of roots: *manner* roots specify as part of their meaning the way an action or event progress is carried out, while *result* roots specify a resultant state.



Manner roots are merged as the specifier of the small *v*, while *result* roots are merged as the complement of *v*.

Following Kratzer (1996), Alexiadou et al. (2015) propose that all external arguments are generated in the specifier of VoiceP because the EA is not an argument of the verb, and all internal arguments are merged in the specifier of ν P.

Moreover, according to Alexiadou et al. (2015), structures in which there is no EA do not have the Voice, for example, unaccusatives and anticausatives, because there is no evidence revealing an implicit/explicit EA. The structure is:

(59) [vP [Root/ResultP]]

However, the structure in (59) predicts that anticausatives never relate to any voice morphology due to the absence of the category, which contradicts the existence of voicerelated morphology in some anticausative structures of some languages (non-active morphology in Greek, the reflexive particle in Romance languages, and the pronoun in Germanic languages, etc.). To solve this problem, Alexiadou et al. (2015) classify anticausatives into two types:

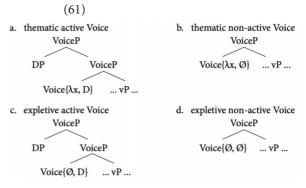
i. Unmarked anticausatives (which do not have any morphology related to Voice)

ii. Marked anticausatives (by some morphology related to Voice)

Sentences in type i still have the structure of (59) and in sentences of type ii the morphology associated with anticausative markers is realized in the nucleus or specifier of this additional projection:

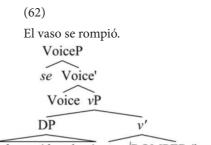
(60) [VoiceP [vP [Root/ResultP]]]

More specifically, Alexiadou et al. (2015) propose to break down the semantic property of the syntactic property of Voice. The two properties can, but do not necessarily coincide. Active causative verbs are transitive both syntactically and semantically, while their passive counterparts are only semantically transitive (and syntactically intransitive due to the implicit EA). On the one hand, the Voice projection that introduces a semantic argument is called "thematic Voice"; on the other, for anticausatives that lack the thematic EA (in Romance and Germanic languages), there is an "expletive Voice" projection. Depending on whether the voice is active or not, in sum, it is divided into four types of Voice:



(Alexiadou et al. 2015: 109)

Like Spanish anticausatives as seen in example (62), the presence of a non-thematic argument *se* that marks the sentence indicates the use of an expletive active Voice.

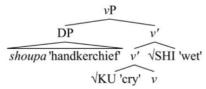


el vaso 'the glass' v VROMPER 'break'

The anticausatives RVC in Chinese that we deal with in this work do not have any marker. Therefore, they do not have VoiceP. And because V2 represents a result, it should be merged as a complement of v. Depending on whether V1 is a light verb, Chinese RVC structures can be divided into two main categories: 1. V1 is a light verb without interpretation; 2. V1 is a lexical verb. (63) When V1 is a light verb: a. Beizi da-sui-le. vP \overline{DP} v' \overline{beizi} 'glass' v \sqrt{SUI} 'get broken' \sqrt{DA} 'hit'

However, when V1 is a lexical verb, there is no suitable structure in Spanish to correspond to it. This is due to the Talmy's classification we mentioned earlier.

> (64) When V1 is a lexical verb: *Shoupa da-shi-le.*



In (64), *ku* 'cry' is the manner, so it is merged as a specifier, while *shi* 'wet' is the result, serving as a complement of *v*.

CONCLUSION

This article examines a special type of Chinese V-V resultative sentence (RVC) where V1 and V2 have different subjects, proposing that it exhibits middle characteristics. By mapping Chinese RVC structures onto Spanish *se* constructions, we identified their shared middle nature.

We revisited the definition of middle construction, dividing it into narrowly-defined middles (subject as patient) and broadly-defined middles, which include dynamic structures like Chinese RVCs and Spanish *se*. This paper also highlights the syntactic and semantic differences between middle and passive constructions: middle sentences form implicit subjects at the pre-syntactic level, while passive agents arise via NP-movement. Following Alexiadou et al. (2015), we analyzed Chinese anticausative middles, distinguishing two subtypes based on V1 (light verb vs. lexical verb). Chinese RVCs lack morphological markers for anticausativity, with patients generated in the specifier of *v*P. In contrast, Spanish middle *se*, as an anticausative marker, retains a Voice projection but without introducing an EA. Spanish, as a verb-framed language, relies on adjuncts for manner expression, aligning *se* constructions with Chinese RVCs where V1 is a light verb.

This comparison reveals subtle distinctions in how Chinese and Spanish handle anticausative structures. Understanding these differences is essential for drawing parallels between the two languages, particularly to aid Chinese students in learning Spanish syntax.

ABBREVIATIONS

ASP aspecto CLF classifier CL clitic DO direct object EA external argument FUT future 10 indirect object NP noun phrase PASS passive PL plural PP. past participle PRES present PRON pronoun PST past **REFL** reflexive RVC resultative V-V compounds sG singular V verb vP verb phrase

REFERENCES

Ackema, Peter & Schoorlemmer, Maaike. 1993. The middle construction and the syntax-semantics interface. In OTS working papers, OTS-WP-TL-93-008. JK Utrecht: Utrecht University.

Ackema, Peter & Schoorlemmer, Maaike. 1994. Middles and nonmovement. In *OTS working papers*, OTS-WP-TL-93-008. JK Utrecht: Utrecht University.

Alexiadou, Artemis, Anagnostopoulou, Elena & Schäfer, Florian. 2015. *External Arguments in Transitivity Alternations: A Layering Approach*. Oxford: Oxford University Press.

Authier, J. Marc & Reed, Lisa. 1996. On the Canadian French middle. Linguistic Inquiry 27. 513-523.

Cheng, L.-S. Lisa & Huang, C.-T. James. 1995. On the argument structure of resultative compounds. In Y. Chen, J. Ovid & L. Tzeng (eds.), *In honour of William S.-Y. Wang: Interdisciplinary studies in language and language change*,187–221. Taiwan: Pyramid.

Cheng, L.-S. Lisa, Huang, C.-T. James, Li, Y.-H. Audrey & Tang, C.-C. Jane. 1997. Causative compounds across Chinese dialects: A study of Cantonese, Mandarin and Taiwanese. *Chinese Languages and Linguistics* 4, 199–224.

Deng, Siying. 2003. Hanyu beidongju jufa fenxi de chongxin sikao 漢語被動句句法分析的重新思考. Contemporary Linguistics, 10(4), 308-319.

Deng, Siying. 2004. Zuogehua he hanyu beidongju 作格化和漢語被動句. Zhongguo Yuwen, (4), 291-383.

Fagan, Sarah M. B. 1992. The Syntax and Semantics of Middle Constructions. Cambridge University Press.

Feng, Sarah M. B. 1997. Prosodic structure and compound word in classical Chinese. In J. Packard (ed.), *New approaches to Chinese word formation: Morphology, phonology, and the lexicon in modern and ancient Chinese*, 197–260. Berlin: Mouton de Gruyter.

Gu, Yang. 1992. The syntax of resultative and causative compounds in Chinese. New York: Cornell University (Doctoral dissertation.).

Huang, C.-T. James. 2001. Chinese passives in comparative perspective. Tsing Hua Journal of Chinese Studies, 29(1). 423-509.

Huang, C.-T. James., Li, Y.-H. Audrey & Li, Yafei. 2009. The Syntax of Chinese. Cambridge: Cambridge University Press.

Huang, Borong & Liao, Xudong. 2006. Xiandai Hanyu. Beijing: Higher Education Press.

Huang, Zhangkai. 1987. Xiandai hanyu changyong jushi. Beijing: Beijing Jiaoyu Chubanshe.

Hu, Xuhui. 2019. Kuayuyan shijiao xia de hanyu zhongdongju yanjiu 跨語言視角下的漢語中動句研究. Contemporary Linguistics, 21(1). 83-103.

Keyser, Samuel & Roeper, Thomas. 1984. On the middle and ergative constructions in English. Linguistic Inquiry, 15. 381-416.

Levin, Beth & Rappaport Hovav, Malka. 1995. Unaccusativity: At the Syntax–Lexical Semantics Interface (Linguistic Inquiry Monograph 26). Cambridge: MIT Press.

Li, Charles & Thompson, Sandra A. 1981. *Mandarin Chinese: a functional reference grammar*. Los Angeles: University of California Press.

Li, Yafei. 1990. On V-V compounds in Chinese. Natural Language & Linguistic Theory, 8. 177-207.

Liu, Jiaxun. 2021. The Syntax of V-V Resultatives in Mandarin Chinese. Singapore: Springer.

Mendikoetxea, Amaya. 1999. Construcciones con se: medias, pasivas e impersonales. In I. Bosque & V. Demonte (Eds.), *Gramática descriptiva de la lengua española* Vol. II, 1631-1722. Madrid: Espasa Calpe.

Real Academia Española. 2009. Nueva gramática de la lengua española. Madrid: Espasa Libros.

Real Academia Española & Asociación de Academias de la Lengua Española. 2019. *Glosario de términos gramaticales*. Salamanca: Universidad de Salamanca.

Reinhart, Tanya. 2000. The theta system: Syntactic realization of verbal concepts. UiL OTS Working Papers.

Roberts, Ian. 1987. The Representation of Implicit and Dethematized Subjects. Berlin, New York: De Gruyter Mouton.

Sánchez López, Cristina. 2002. Las construcciones con se. Estado de la cuestión. In C. Sánchez López (ed.), *Las construcciones con se*, 18-163. Burgos: Visor Libros.

Stroik, Thomas. 1999. Middles and reflexivity. Linguistic Inquiry, 30. 119-131.

Sung, Kuo-ming. 1994. Case assignment under incorporation. Los Angeles: University of California (Doctoral dissertation.).

Talmy, Leonard. 1991. Path to realization - a typology of event conflation. Berkeley Linguistics Society (BLS) 17. 480-519.

Talmy, Leonard. 2000. Toward a cognitive semantics. Cambridge: MIT Press.

Ting, Jen. 1998. Deriving the BEI-Construction in Mandarin Chinese. Journal of East Asian Linguistics, 7. 319-354.

Ting, Jen. 2006. The Middle Construction in Mandarin Chinese and the Presyntactic Approach. *Concentric: Studies in Linguistics*, 32.1. 87-117.

Wang, Li. 1985. Zhongguo xiandai yufa. Beijing: The Commercial Press.

Wu, Gengtang. 1999. "Bei" ziju de tezheng yu zhuanhuan"被"字句的特徵與轉換. Contemporary Linguistics, (4). 25-37.

Xing, Fuyi. 1997. Hanyu yufaxue. Changchun: Northeast Normal University Press.

Xiong, Jiaxuan. 2017. Chinese Middle Constructions. Beijing: Peking University Press.

Xiong, Zhongru. 2003. Hanyu beidongju jufa jiegou fenxi 漢語被動句句法結構分析. Contemporary Linguistics, 5(3): 206-221.

Xu, Zenghui & Zhou, Minkang. 1997. Hanyu yufa. Bellaterra: Servei de Publicacions de la Universitat Autònoma de Barcelona.

Yip, Po-Ching & Rimmington, Don. 2015. Gramática intermedia del chino: teoría y práctica (2a ed.). Madrid: Adeli Ediciones.

Yip, Po-Ching, Rimmington, Don. 2015. *Gramática de la lengua china*. Adapted by Taciana Fisac, translated by Luis Roncero and Taciana Fisac, 1st ed. Madrid: Cátedra.