

A comparative study of *how* and *why* in Taiwan Southern Min and Mandarin Chinese

Seng-Hian Lau and Wei-Tien Dylan Tsai

National Taiwan Normal University | National Tsing Hua University

From looking into the same and different properties of *how* and *why* between Taiwan Southern Min and Mandarin Chinese, this paper aims to explain the post-verbal *how* construction with negative speaker attitude. Based on our observations and findings of the specific usages of *sī* and *leh*, we propose an analysis for the construction in question. According to our analysis, this construction is not a simple product of a single element, but a composition of *sī* and *leh*, which together generate the negative speaker attitude, and the verb with a post-verbal *how*, which produce a causal *how* reading.

Keywords: *wh*-adverbials, non-canonical questions, Southern Min

1. Introduction

This study indicates a variety of morpho-syntactic distinctions of *how* and *why* between Taiwan Southern Min (henceforth TSM) and Mandarin Chinese (henceforth MC), especially aiming to account for the attitudinal post-verbal *how* construction only found in TSM. Since Huang's (1982) seminal study of *whs*-in-situ, relevant issues have drawn a lot of attention in the field of comparative syntax. In this context, *how* and *why* are of particular interest as their interpretations have a systematic bearing upon their distribution in syntactic projections (cf. Tsai 2008; Stepanov & Tsai 2008). Despite an abundant literature on Mandarin *wh*-construals, not much attention has been paid to the typological variations among Sinitic languages. In this study, we shall compare the usages and distribution of *how* and *why* between TSM and MC, with a focus on a particular construction in TSM, which motivates this study and constitutes the most characteristic example of using *how* in TSM.

Here is the pair of examples that caught our eye from the very beginning:

- (1) Context: The coach believes that Tsuisun can win a medal in the 100-meter dash and eagerly looks forward to it. He is shocked to see Tsuisun fall on the track and says:

I sī leh puáh-tó án-tsuánn?! (TSM)

he SI LEH tumble how

伊是咧 跋倒 按怎

‘How the heck can he fall?’¹

- (2) In the same context as (1)

**Tā shì zài diédǎo zěnmē?!* (MC)

he be PROG tumble how

他是在 跌倒 怎麼

(Intended) ‘How the heck can he fall?’

The above two sentences appear in exactly the same word order with the counterparts of lexical items well aligned, whereas only (1), but not (2), is grammatical. Where is the contrast derived from? Now let us try to find out their differences with minimal pairs.

First, the reader may have noticed that we did not gloss *leh*, the presumable counterpart of *zài*, as progressive aspect in (1). The reason is that the co-occurrence of the presumable progressive aspect marker *leh* with the achievement verb *puáh-tó* ‘to tumble’ is suspicious, as illustrated below:

- (3) a. *I leh khàu.* (TSM)²

he PROG cry

伊咧 哭

‘He is crying.’

- b. **I leh puáh-tó.*

he PROG tumble

伊咧 跋倒

(Intended) ‘He is in the process of falling down.’

1. We use “how” (causal how), “what...for”, and “why” interchangeably to translate sentences containing post-verbal *how/what* throughout this paper, to avoid awkward and unnatural English translations.

2. An anonymous reviewer suggests that, from the compatibility of *leh* with non-dynamic predicates in TSM, *leh* is not necessarily a progressive marker; rather it may be a continuative marker. We appreciate and agree with this suggestion. The aspect usage of *leh* in TSM deserves another independent study to investigate in depth and we hope to address it in the future research.

- (4) a. *Tā zài kū.* (MC)
 he PROG cry
 他在哭
 ‘He is crying.’
 b. **Tā zài diédǎo.*
 he PROG tumble
 他在跌倒
 (Intended) ‘He is in the process of falling down.’

As exemplified above, no evidence in general indicates that *leh*, when being used as a progressive aspect, differs from its MC counterpart *zài*. Therefore, what we see in (1) should be a homonym denoting something else. To preclude this *leh*’s influence, we change the verb in (1) and (2) and come up with the following examples:

- (5) *I sī leh khàu án-tsuánn?!* (TSM)
 he SI LEH cry how
 伊是咧哭按怎
 ‘What the heck is he crying for?’
 (6) **Tā shì zài kū zěnnme?!* (MC)
 he be PROG cry how
 他是在哭怎麼
 (Intended) ‘What the heck is he crying for?’

With an activity predicate, the contrast remains. In addition to the fact that *leh* in this kind of sentence is not a progressive aspect marker, one may wonder what the *sī* bears on the sentence. The sentences below demonstrate what happens without the *sī*.

- (7) *I leh khàu án-tsuánn?* (TSM)
 he PROG cry how
 伊咧哭按怎
 ‘What is he crying for?’
 (8) **Tā zài kū zěnnme?* (MC)
 he PROG cry how
 他在哭怎麼
 (Intended) ‘What is he crying for?’

Deleting *shì*, the counterpart of *sī*, does not rescue the MC sentence. However, interestingly, the construal of the TSM sentence changes. Compare the following two examples:

- (9) *I sī leh khàu án-tsuánn?! (TSM)*
 he SI LEH cry how
 伊是咧 哭 按怎
 ‘What the heck is he crying for?’

- (10) *I leh khàu án-tsuánn? (TSM)*
 he PROG cry how
 伊咧 哭 按怎
 ‘What is he crying for?’

Unlike (9), which is a question with a special speaker attitude, (10) is a common question, unless being added with additional intonation. The contrast is made clearer with the context illustrated below:

- (11) Context: In a class of earth science, a teacher raises a question about the ocean. She asks the student with the following sentence why sea water is salty:
Ták-ke --ah, lín kám tsai-iánn... (TSM)
 everyone PTC you Q know
 逐家 啊 恁 敢 知影
 ‘Hey guys, do you know...’
- a. *Hái-tsuí sī-án-tsuánn ē kiâm-kiâm --leh? (TSM)³*
 sea.water why will salty.salty PTC
 海水 是按怎 會 鹹鹹 咧?
 ‘Why is sea water salty?’
- b. *Hái-tsuí án-tsuánn ē kiâm-kiâm --leh?*
 sea.water how will salty.salty PTC
 海水 按怎 會 鹹鹹 咧?
 ‘What causes sea water to be salty?’
- c. *#Hái-tsuí sī leh kiâm án-tsuánn?*
 sea.water si leh salty how
 海水 是咧 鹹 按怎?
 ‘What the heck is sea water so salty for?’

Contrary to (11a) and (11b), (11c) is infelicitous due to its additional speaker attitude of complaining construal.

The examples in (9) and (11c) are reminiscent of Obenauer (2004)’s surprise-disapproval questions (SDQs) that obligatorily express an attitude of the speaker towards the propositional content, an attitude of surprise with a negative orienta-

3. Note that *sī-án-tsuánn*, morphologically *be-how*, has been lexicalized into a single word which means ‘why’. The lexical status of it is clear for nothing can come in between the two morphemes, *sī* and *án-tsuánn*.

tion, i.e. combined with disapproval. Nonetheless, they differ in that the utterers of the TSM question illustrated in (9) are not necessarily surprised. What is surely connoted is the negative orientation indicating the speaker's displeasure with the propositional content. Thus, (9) expresses the speaker's disapproval concerning the crying event. With the contrast between (9) and (10), we then learn that *sī* is indispensable when one employs *leh*, which is not a progressive aspect, to make a complaining question (probably of a subtype of SDQs), illustrated in (1), (5), and (9).

Since *sī* and *leh* are next to each other in the pertinent examples so far, one may suggest that they make a single lexical item and should not be considered separately. However, see (12):

- (12) *I sī bô-tāi-bô-tsi leh khàu án-tsuánn?* (TSM)
 he SI without.reason LEH cry how
 伊是無代無誌 咧 哭 按怎
 'What the heck is he crying for, without an apparent reason?'

The insertion of an adverb between *sī* and *leh* in (12) indicates that these two elements are two items and have to be dealt with respectively.

Now let us move to another part of (1): the *wh*-element. Compare (14) with (13), which only differs from (7) in choosing another *wh*-element:

- (13) *I leh khàu siánn?* (TSM)
 he PROG cry what
 伊咧 哭 啥
 'What is he crying for?'
- (14) *Tā zài kū shénme?* (MC)
 he PROG cry what
 他在 哭 什麼
 'What is he crying for?'

In contrast to the pair of (7) and (8), both (13) and (14) are grammatical now. From the contrast between these two pairs, we see that the two languages are not entirely parallel when it comes to the way in which *how* is used. As pointed out in Tsai (2008), the bare *how* form cannot occur post-verbally in MC. Nonetheless, it is not problematic to have the bare *how* form in TSM following a verb, as shown in (1), (5), (7), (9), (10), and (12). In fact, the occurrence of post-verbal *how* is not limited to the above-mentioned kinds of sentences. In contrast to the ungrammatical (15a), (16a) is without a problem ((15) is reproduced from Tsai 2008: 86 (7)):

- (15) a. **Zhè-jiàn shì, Ākiū chǔlǐ-de zěnmē?* (MC)
 DEM-CL matter Akiu handle-RES how
 這件事 阿Q 處理得 怎麼
 (Intended) ‘How did Akiu handle this matter?’
- b. *Zhè-jiàn shì, Ākiū chǔlǐ-de zěnmē-yàng?*
 DEM-CL matter Akiu handle-RES how-manner
 這件事 阿Q 處理得 怎麼樣
 ‘How did Akiu handle this matter?’
- (16) a. *Tsit-kiānn tāi-tsi, Tsui-sūn tshú-lí liáu án-tsuánn?* (TSM)
 DEM-CL matter Tuisun handle RES how
 這件事 代誌 水順 處理 了 按怎
 ‘How did Tuisun handle this matter?’
- b. *Tsit-kiānn tāi-tsi, Tsui-sūn tshú-lí liáu án-tsuánn-iūnn?*
 DEM-CL matter Tuisun handle RES how-manner
 這件事 代誌 水順 處理 了 按怎樣
 ‘How did Tuisun handle this matter?’

In MC, for *how* to occur post-verbally, it is obligatory to attach the morpheme *yàng* to it (see (15)). However, in TSM, with or without the morpheme *iūnn*, the counterpart of *yàng*, there is no problem for *how* to follow the verb, as shown in (16).

To sum up, based on observations of a specific construction, we have seen that there is a *leh* in TSM used differently from progressive aspect *leh*, the counterpart of *zài* in MC. Second, this usage of *leh* is available only when there is a *sī* preceding it. Third, using *how* in TSM is not totally parallel to using *how* in MC.

With respect to replacing the *wh*-element in (13) and (14), an attentive reader may raise a question about having *what* instead of *how* in the construction, as is shown below:

- (17) *I sī leh khàu án-tsuánn?!* (TSM)
 he SI LEH cry how
 伊是咧 哭 按怎
 ‘What the heck is he crying for?’
- (18) *I sī leh khàu siánn?!* (TSM)
 he SI LEH cry what
 伊是咧 哭 啥
 ‘What the heck is he crying for?’

According to my consultant, no difference can be found between the two. In all the contexts in which (17) can be used, (18) is acceptable, too, and vice versa.

Nonetheless, it would be too hasty to jump to the conclusion that *how* and *what* are perfect substitutes in TSM. We shall return to this issue later.⁴

Starting with looking into the contrast between (1) and (2), now we have several questions to answer. Aiming at answering these questions, we organize this paper in the following way.

In § 2, we shall compare the usages of *how* and *why* between TSM and MC because of the discrepancies of using *how* and the ‘why’ and ‘what for’ readings emerge when the sentences employing *how*. Since the construction exemplified in (1) is notable in the use of *how* and *why* in TSM, we shall focus on this construction from § 3, beginning with identifying the *leh*, which is not a progressive aspect, and its necessary companion *sī*. A syntactic analysis will be provided in § 4 based on our observations and presumptions. In § 5, we conclude this paper.

2. Comparing *how* and *why* between TSM and MC

At first glance, the usages and syntactic behavior of *why* and *how* in TSM align themselves with their MC counterparts. Below are some examples of *why* and *how* in TSM.

- (19) a. *Sī-án-tsuánn jít-thâu long uì tang-pîng --tshut-lâi?* (reason *why*; TSM)
 why sun all from east out.come
 是按怎 日頭 攏 對 東片 出來
 ‘Why does the sun always rise in the east?’
- b. *Sī-án-tsuánn tsit-tsia̍h toh-á ē hāi --khì?* (causal *why*)
 why DEM-CL table would broken ASP
 是按怎 這隻 桌仔 會 害 去
 ‘Why is this table broken?’
- c. *Án-tsuánn tsit-tsia̍h toh-á ē hāi --khì --ah?* (causal *how*)
 how DEM-CL table would broken ASP ASP
 按怎 這隻 桌仔 會 害 去 矣
 ‘Why is this table broken?’
- d. *Tsuí-sūn long án-tsuánn khi siōng-pan?* (instrument *how*)
 Tsuisun all how go work
 水順 攏 按怎 去 上班
 ‘By what means does Tsuisun go to work?’

4. An anonymous reviewer is right in pointing out that it is of vital importance to ferret out why the post-verbal *siánn* ‘what’ is acceptable in non-argument position, such as seen in (18). In our proposal, we adopt Lin’s (2001) light verb analysis to introduce a covert light verb to resolve this ostensible problem (see § 4).

- e. *Tsuí-sūn án-tsuánn tshú-lí tsit-kiānn tāi-tsi --ê?* (manner *how*)
 Tsuisun how handle DEM-CL matter PTC
 水順 按怎 處理 這件 代誌 的
 ‘In what manner did Tsuisun handle that matter?’
- f. *Tsuí-sūn tāi-tsi tshú-lí liáu án-tsuánn?* (descriptive/resultative *how*)
 Tsuisun matter handle RES how
 水順 代誌 處理 了 按怎
 ‘How did Tsuisun handle that matter?’

The reader can find clear semantic and syntactic criteria for the distinction among reason *why*, causal *why*, instrument *how*, manner *how*, and descriptive/resultative *how* in § 2 and § 3 in Tsai (2008). We shall not go over them one-by-one here as there is no difference in these aspects between the two languages.⁵ Below we shall point out only the advantage of TSM tone sandhi in distinguishing causal *how* from instrumental/manner *how*.

Tsai has noted that, in the case of MC, both causal *how* and instrument/manner *how* can be demarcated by an adverb or a modal (2008: 85–86). Below are from Tsai (2008: 85 (6)).

- (20) a. *Ākiū kěyǐ zěnmē(-yàng) qù Táiběi?* (instrumental; MC)
 Akiu can how(-manner) go Taipei
 阿Q 可以 怎麼(樣) 去 台北
 ‘How can Akiu go to Taipei?’
- b. *Ākiū zěnmē(*-yàng) kěyǐ qù Táiběi?* (causal/denial)
 Akiu how(-manner) can go Taipei
 阿Q 怎麼(樣) 可以 去 台北
 ‘How come Akiu could go to Taipei?’
 ‘Akiu can’t/shouldn’t go to Taipei.’

As pointed out by Tsai, pre-modal *zěnmē* forms a causal question in (20b), whereas post-modal *zěnmē* forms an instrumental question in (20a).

Tsai’s criteria are applicable in distinguishing between causal *how* and instrument/manner *how* in TSM. It is noteworthy that tone sandhi occurrence alone

5. An anonymous reviewer correctly points out that, regarding *how*, there are false friends in the languages compared. We agree that it would be useful to tease out the grammatical features associated with each formative based on its structural properties. Nonetheless, as per the suggestion from another reviewer and the board-of-editors, we revised this paper to be more focused and explicit. Consequently, we have to leave the comparative work on *how*-words between these two languages to future research. Although we cannot provide a comprehensive comparative work of *how*, under our analysis of the post-verbal *how* in § 2.2 and § 2.3, the targeted construction should be able to obtain a satisfactory explanation, under the principle of compositionality, as suggested by the reviewer.

can serve the demarcating purpose as TSM has a richer tonal system. Compare (21) with (22) and note especially the superscripted numbers on the second syllable of *án-tsuánn*, which mark the tone patterns.

- (21) *Tsuí-sūn án-tsuánn*⁵¹ *leh bó huann-hí --ah?* (causal *how*; TSM)

Tsuisun how ASP NEG happy PTC

水順 按怎 咧 無 歡喜 啊

‘Why is Tsuisun unhappy?’

- (22) *Tsuí-sūn án-tsuánn*⁵⁵ *leh bó huann-hí --ah?* (manner *how*; TSM)

Tsuisun how ASP NEG happy PTC

水順 按怎 咧 無 歡喜 啊

‘In what way did Tsuisun show his discontentedness?’

In contrast to the causal *how* in (21), which is pronounced with a falling tone on its second syllable (the citation tone), the manner *how* in (22) has its second syllable carry a high-level tone (the sandhi tone). With this tonal differences, TSM speakers can distinguish causal *how* from instrument/manner *how* even though there is no overt demarcater.

Apart from their shared properties, now we turn to their differences.

There are at least three aspects that distinguish *why* and *how* in TSM from their counterparts in MC: The rising of the bare *how* form, using *how* as *what*, and the post-verbal *how* as causal *how*. In the following, we shall discuss each of them in turn.

2.1 The rising of the bare *how* form in TSM

When it comes to *how*, the losing of the counterpart of MC *zěme-yàng* ‘how-manner’ in today’s TSM is the most conspicuous. For instance, as observed in Tsai 2008, the bare *how* form cannot occur post-verbally in MC, when *how* is used descriptively or resultatively (Tsai 2008). This restriction is however not observed in TSM. Compare (23) with (24) ((23) is from Tsai 2008: 86 (7)).

- (23) *Zhè-jàn shì, Ākiū chǔlǐ-de zěnmē*(-yàng)?* (MC)

DEM-CL matter Akiu handle-RES how(-manner)

這件事 阿Q 處理得 怎麼*(樣)

‘How did Akiu handle this matter?’

- (24) *Hit-kiānn tāi-tsi, Tsuí-sūn tshú-lí liáu án-tsuánn(-iūnn)?* (TSM)

DEM-CL matter Tsuisun handle RES how(-manner)

彼件 代誌 水順 處理 了 按怎(樣)

‘How did Tsuisun handle that matter?’

Unlike its MC counterpart in (23), the morpheme *-iünn* is optional in TSM. For the majority of today's TSM speakers, it is more natural to drop this morpheme than to keep it; the *how*-manner form has come to sound literary or even archaic to the ear of a modern-day speaker.

In fact, the decline of the TSM *how*-manner happened not long ago. This item not only was strong in the history but also begat the bare *how* form. We find a clue in the relevant entries from the dictionaries based on the dates of their publications in temporal order, compiled in (25).

(25)	Year	Dictionary	Entries and their denotations
	1873	<i>Chinese-English dictionary of the vernacular or spoken language of Amoy</i>	<p>àn-tsáinn-iünn (按怎樣) = tsáinn-iünn (怎樣) = tsáinn-á-iünn (怎仔樣) = tsuánn-iünn (怎樣) = tsuánn-ninn-iünn (怎咩樣): <i>how</i></p> <p>in-hô (因何): <i>why; how</i></p> <p>minnh-sái (乜使): <i>why; Implying some fault or that no proper answer can be given</i></p> <p>hò-kò (何故): <i>why</i></p> <p>siánn-sū (啥事): <i>why; why ever (with more or less idea of finding fault)</i></p>
	1931–1932	<i>Tai-ni syoujiten</i> [Comprehensive Taiwanese-Japanese dictionary]	<p>àn-tsáinn-iünn (按怎樣) = tsáinn-á-iünn (怎仔樣) = tsáinn-á (怎仔) = tsáinn-ni-iünn (怎咩樣) = àn-tsuánn (按怎): 1. <i>why</i></p> <p>2. <i>how</i></p>
	1969	<i>Guóyǔ Mǐnnányǔ duìzhào chángyòng cídiǎn</i> [A comparative Mandarin-Southern Min dictionary of frequently used expressions]	<p>àn-tsuánn (按怎): <i>how; why</i></p> <p>àn-tsuánn-iünn (按怎樣): <i>how; why</i></p> <p>tsáinn-iünn (怎樣) = tsáinn-á (怎仔) = tsáinn-iünn-á (怎樣仔): <i>how</i></p>
	1973	<i>A dictionary of Southern Min</i>	<p>àn-tsuánn-iünn (按怎樣): <i>How? In what way or manner? What happened?</i></p> <p>tsáinn-iünn (怎樣): <i>In what way; why</i></p>
	2009	<i>TJ Táiyǔ báihuà xiǎo cídiǎn</i> . [TJ's dictionary of non-literary Taiwanese]	<p>án-tsuánn (按怎): <i>how; why</i></p> <p>án-tsuánn-iünn (按怎樣): <i>how; why</i></p> <p>sī-án-tsuánn (是按怎): <i>why</i></p>
	2012	<i>Shíyòng Táiyǔ cídiǎn</i> [A practical dictionary of Taiwanese]	<p>án-tsuánn (按怎): <i>how; why</i></p> <p>sī-án-tsuánn (是按怎): <i>why</i></p>

We should take note that dictionaries are lagging indicators of the linguistic facts in the sense that lexicographers tend to include only established lexical items. From (25), we can see that *how* and *why* shared the same lexical items since long ago, aside from those *why* words in Amoy in the 19th century. The new dedicated *why* word *sī-án-tsuánn* has not been recorded by lexicographers until

recently.⁶ On the other hand, the *how*-manner form was once the common form that denoted either *why* or *how*, without a bare *how* counterpart. We cannot find the bare *how* form in the dictionaries published in 1873 and 1931/1932. The *Guóyǔ Mǐnnányǔ duìzhào chángyòng cídiǎn*, which was published in 1969, is the first one to include the entry *án-tsuánn*, the bare *how* without the morpheme *-iünn* (manner), indicating that the dropping of this suffix began no later than 1960s. However, more than fifty years later, among today's TSM speakers, the bare *how* form has already supplanted all usages of *how*-manner.

So far we have seen how the *how*-manner gradually dropped the “-manner” and was later on completely taken over by bare *how*. Keeping this in mind we are now able to account for some apparent differences between TSM and MC.

First, remember the contrast between (23) and (24). The licit occurrence of the TSM bare *how* post-verbally, contrary to its MC counterpart, only reflects the diachronic development of *how* in TSM, which, since the early days, does not distinguish between *how* and *how*-manner lexically.

Second, in the documents in Amoy and TSM written before the 1950s, *how*-manner was used where it is not allowed in MC. Here are two of such sentences:

- (26) *Án-tsuánn-iünn tsiáh tsiú ê lâng tsin guí-hiám?* (Early TSM)
 how-manner eat alcohol LK person really dangerous
 按怎樣 食酒 的人 真 危險
 ‘Why are wine drinkers in danger?’

(From *Tâi-oân Kàu-huē-pò* 367:1. Oct., 1915)

- (27) *Ông sóo tshut ê bīng-līng tsáinn-iünn kàu tsiah kín-kip ah?* (Amoy)
 king PTC out LK order how-manner to so urgent EXCL
 王 所 出 的 命令 怎樣 到 遮 緊急 啊
 ‘Why is the decree from the king so hasty?’

(From *Amoy Romanized Bible* published in 1933; *Book of Daniel* 2:15)

- (28) *Zhāngsān zěme(*yang) zhème jí ya?* (MC)
 Zhangsan how-manner so hurry PRT
 張三 怎麼(*樣) 這麼 急 呀
 ‘Why is Zhangsan so hurrying?’

6. Under the strong influence of MC in Taiwan, *sī-án-tsuánn* ‘why’ (lit. *be-how*) has been on its way to extinction. Many young speakers now employ *uī-siánn-mih* ‘why’ (lit. *for-what*), a morphologically corresponding form of MC *wèishéme* (lit. *for-what*) instead. Note that we cannot affirm that *án-tsuánn* had functioned both as reason *why* and causal *why* before *sī-án-tsuánn* was coined, for there were other *why* words, such as *in-hô* ‘because-what’ and *in-mih* ‘because-thing’ (now both sound archaic), that seem to serve better as reason *why* before *sī-án-tsuánn* came into play. Due to lack of evidence from historical texts, we leave this issue open.

Again, (26) and (27) are just records from the heyday of *how*-manner in Southern Min. After giving ground to the young bare *how* form for decades, (26) and (27) have become unnatural to the ears of today's TSM speakers. At any rate, this language, unlike MC, still draws no distinction between *how* and *how*-manner. It is the predominant lexical item that has changed, while its characteristic remains.

2.2 Using *how* as *what*

Interestingly, there are instances in which TSM can employ *how* instead of *what*, in contrast to MC. See the examples below:

- (29) a. *Tsuí-sūn kám ũ kóng siánn /án-tsuánn?* (TSM)
 Tsuisun Q have say what /how
 水順 敢 有 講 啥 /按怎
 'Did Tsuisun say anything?'
 b. *Tsuí-sūn ũ siá siánn /án-tsuánn --bô?*
 Tsuisun have write what /how NEG
 水順 有 寫 啥 /按怎 無
 'Did Tsuisun write anything?'
 c. *Tsuí-sūn lóng bô kau-tài siánn /án-tsuánn.*
 Tsuisun all NEG make.clear what /how
 水順 攞 無 交代 啥 /按怎
 'Tsuisun didn't make things clear at all.'
- (30) a. *Ākiū shuō le shénme /*zěnmě /*zěnmeyàng ma?* (MC)
 Akiu say PFV what /how /how-manner Q
 阿Q 說 了 什麼 /怎麼 /怎麼樣 嗎
 (Intended) 'Did Akiu say anything?'
 b. *Ākiū xiě le shénme /*zěnmě /*zěnmeyàng méiyǒu?*
 Akiu write PFV what /how /how-manner not.have
 阿Q 寫 了 什麼 /怎麼 /怎麼樣 沒有
 (Intended) 'Did Akiu write anything?'
 c. *Ākiū dōu méi jiāodài shénme /*zěnmě /*zěnmeyàng.*
 Akiu all NEG make.clear what /how /how-manner
 阿Q 都 沒 交代 什麼 /怎麼 /怎麼樣
 (Intended) 'Akiu didn't make things clear at all.'

Unlike TSM, in which *how* and *what* can be used interchangeably in (29), the same is not possible in MC, as only *what* is allowed. A reviewer points out that the *wh*-elements in these examples seem to be negative polarity items, licensed by the interrogative force of a negation operator. Is *how* allowed to replace *what*

only in certain specific contexts in TSM? The answer is affirmative. Compare the examples below:

- (31) *Lí beh tsiáh siánn /*án-tsuánn?* (TSM)
 you want eat what /how
 你 欲 食 啥 /按怎
 ‘What do you want to eat?’
- (32) a. *Lí sī leh tsiáh siánn /án-tsuánn?!* (TSM)
 you SI LEH eat what /how
 你 是 咧 食 啥 /按怎
 ‘What the heck are you eating for?’
- b. *Uī-tsuánn-iünn /siánn-mih lí bô ài guá --ah?*
 for-how-manner /what you NEG love I PERF
 為怎樣 /啥物 你 無 愛 我 矣
 ‘Why don’t you love me anymore?’

The discrepancy of *how*’s supplanting *what* in TSM can be seen quite clearly by putting (29) and (32) in a group contrasting (31).⁷

Now readers may have an impression that this kind of supplanting only occurs in TSM. We nevertheless find similar examples in MC, as shown in (33):

- (33) *Nǐ xiǎng chéngwéi zěnmeyàng /shénmeyàng de rén?* (MC)
 you want become how-manner /what-manner LK person
 你 想 成為 怎麼樣 /什麼樣 的人
 ‘What kind of person do you want to be?’
- (34) *Lí siünn-beh tsiánn-tsò án-tsuánn-iünn /siánn-mih-khuán ê lâng?* (TSM)
 you want become how-manner /what-kind LK person
 你 想欲 成做 按怎樣 /啥物款 的人
 ‘What kind of person do you want to be?’

It is common for today’s MC speakers – or at least Taiwanese Mandarin speakers – to use *how*-manner instead of *what*-manner to express “what kind”. According to my consultants, neither the supplanting in TSM (see (29) and (34)) nor the supplanting found in MC (see (33)) makes any difference.

7. An anonymous reviewer suggests that the adjunct *wh*-word *án-tsuánn*, in contradistinction to the argument *wh*-word *siánn*, is worth in-depth treatment. We concur with the reviewer in that further investigation is necessary; whereas, since at the post-verbal position these two do not make any difference (as shown in (17) and (18)), we have decided to defer that investigation to keep from wandering too far afield from our main topic.

Should we be surprised by such irregularity? Maybe not. In addition to the modern varieties of Sinitic languages, the similar phenomenon can also be seen in their ancient peers. For example:

- (35) 暴 而 不 戢, 安 能 保 大?
 violent and NEG stop how can remain strong
 'If a state is violent and does not refrain from engaging in wars, how can it remain powerful?' (From *Zuo zhuan*. Duke Xuan of Lu year 12)
- (36) 沛公 安 在?
 Duke.of.Pei where be.in
 'Where is Duke of Pei?'
 (From *Records of the grand historian (Shiji)* vol. 7 The biography of Xiang Yu)

In Old Chinese, when 安 is used as a *wh*-word, it can either be *how* (see (35)) or *where* (see (36)); just like what we saw in those previous examples in which *how* sometimes replaces *what*. In other words, we suggest the partial interchangeability of *how* and *what* in TSM and MC (and presumably *how* and *where* in Old Chinese) be lexical.

To sum up, in both TSM and MC we see examples in which *how* is used to denote *what*. The examples further show that this kind of supplanting occurs more in TSM than in MC. At any rate, it is quite restricted and is possible only in some specific constructions or environments. We therefore suggest it to be purely lexical, probably a remnant in the process of diachronic development.

2.3 The post-verbal *how* as causal *how*

Based on discussions in § 2.1 and § 2.2, we now can try to grasp the meaning of post-verbal *how* in (1).

In § 1, we contrasted (5) with (7) to show that it is the co-occurrence of *sī* and *leh* that changes an ordinary question into a plaintive query. The two sentences are reproduced below:

- (37) *I sī leh khàu án-tsuánn?!* (TSM)
 he SI LEH cry how
 伊是咧 哭 按怎
 'What the heck is he crying for?'
- (38) *I leh khàu án-tsuánn?* (TSM)
 he ASP cry how
 伊咧 哭 按怎
 'What is he crying for?'

As pointed out in § 1, (37) only differs from (38) in having an obligatory additional negative connotation. Since both *wh*-questions employ *án-tsuánn* ‘how’ and they share the question type as a causal *how* question, we learn that, post-verbal *how* can constitute a causal *how* question in TSM.

However, post-verbal *how* with or without the *-manner* morpheme cannot make a grammatical sentence in MC, needless to say a causal *how* question. See the sentences below:

- (39) a. **Tā shì zài kū zěnmē(-yàng)?!* (MC)
 he be PROG cry how(-manner)
 他是在哭怎麼(樣)
 (Intended) ‘What the heck is he crying for?’
 b. **Tā zài kū zěnmē(-yàng)?*
 he PROG cry how(-manner)
 他在哭怎麼(樣)
 (Intended) ‘What is he crying for?’

Both sentences in (39) are ungrammatical, but the sentence becomes good once we replace the post-verbal *how* with *what*. We reproduce (13) and (14) as follows:

- (40) *I leh khàu siánn?* (TSM)
 he PROG cry what
 伊咧哭啥
 ‘What is he crying for?’
 (41) *Tā zài kū shénmē?* (MC)
 he PROG cry what
 他在哭什麼
 ‘What is he crying for?’

Example (41) shows that, unlike *how*, post-verbal *what* is licit in MC. On the other hand, post-verbal *what* is also fine with TSM, as illustrated in (40), and by comparing post-verbal *how* with post-verbal *what* in (17) and (18) we can draw the conclusion that post-verbal *what* and post-verbal *how* are perfect substitutes in TSM.⁸

Remember bare *how* has almost supplanted *how-manner* in TSM, and, consequently, *how-manner* makes a sentence sound archaic and unnatural, though still acceptable. This is also observed in post-verbal *how* sentences.

8. An anonymous reviewer points out that covert functional categories may be needed to explain why we can use ‘the argument *wh*-word’ in (40) and (41). We totally agree with her/him, and we believe Lin’s (2001) light verb analysis can serve this purpose. This is also why we adopt a light verb analysis in the lower part of our analysis for the targeted construction. Please refer to (64) and the explanation below it.

- (42) *I sī leh khàu án-tsuánn-iūnn?!* (TSM)
 he SI LEH cry how-manner
 伊是咧 哭 按怎樣
 ‘What the heck is he crying for?’
- (43) *I leh khàu án-tsuánn-iūnn?* (TSM)
 he ASP cry how-manner
 伊咧 哭 按怎樣
 ‘What is he crying for?’

The two examples above only differ from (37) and (38) respectively by an additional *-manner* morpheme attached to *how*. Both are grammatical, though sound archaic.

In line with the thinking in § 2.2 and the parallelism between (40) and (38), we suggest that the causal *how* question made with a post-verbal *how* is another example of using *how* as *what* in TSM.

3. The non-aspect *leh* and the *sī leh* sequence

So far we have reviewed TSM *how* and *why* and identified the post-verbal *how*. Now it is time to return to the construction containing the post-verbal *how* in § 1. Since this construction has some other obscure but crucial elements, as pointed out in § 1, we have to look into the non-aspect *leh* and the *sī leh* sequence before trying to propose an adequate analysis.

In this section, we shall first examine the non-aspect *leh*, followed by an examination of *sī*.

3.1 The non-aspect *leh*

To recapitulate the usage of *leh* in the construction in question, the pertinent examples are reproduced as follows ((1) and (3b)):

- (44) Context: The coach believes that Tsuisun can win a medal in the 100-meter dash and eagerly looks forward to it. He is shocked to see Tsuisun fall on the track and says:
I sī leh puáh-tó án-tsuánn?! (TSM)
 he SI LEH tumble how
 伊是咧 跋倒 按怎
 ‘How the heck can he fall?’

- (45) **I leh puáh-tó.* (TSM)
 he PROG tumble
 伊咧 跋倒
 (Intended) ‘He is in the process of falling down.’

With the contrast above we argue that the *leh* occurs in the construction exemplified in (44) should not be considered as an aspect.

Furthermore, we also noted in 2.3 that post-verbal *how* is used as a causal *how*, compared to post-verbal *what* found in TSM and MC. For example:

- (46) a. *I leh khàu siánn?* (TSM)
 he PROG cry what
 伊咧 哭 啥
 ‘What is he crying for?’
 b. *I leh khàu án-tsuánn*
 he PROG cry how
 伊咧 哭 按怎
 ‘What is he crying for?’
- (47) a. *Lí khàu siánn?* (TSM)
 you cry what
 你 哭 啥
 ‘What are you crying for?’
 b. *Lí khàu án-tsuánn?*
 you cry how
 你 哭 按怎
 ‘What are you crying for?’

Without extra intonation, the questions in (46) and (47) are neutral *wh*-questions, contrary to (44), which is a question with special speaker attitude.⁹ Since *sī* and *leh* are the only two elements, except for the post-verbal *how*, the subject and the verb, the special speaker attitude must be contributed by *sī* and *leh*. In other words, it is *sī* and *leh* in the construction that give rise to the negative orientation that the speaker is unpleasant by the propositional content.

9. An anonymous reviewer indicates that (47a) can still have the speaker negative attitude in a specific context. In fact, in our survey, both sentences in (47) (and all kinds of interrogatives indeed) can be either neutral or convey the speaker negative attitude, depending on the intonation. What is important here is the compulsory speaker negative attitude when *sī* and *leh* are present in the sentence; in other words, with the sequence of *sī* and *leh* in a sentence, optionality disappears, such that this sentence cannot shed the speaker negative attitude any longer.

In the rest of this subsection, we shall try to pinpoint the syntactic position of this *leh* by examining the relative positions between this element and other adverb(ial)s. To accomplish this at one fell swoop, we list the examples for speech-act adverbs first, secondly the evaluatives, thirdly the evidentials, and lastly the epistemics. In order to provide the reader a proper context, all the examples are presented as in a dialogue.

(48) speech-act > *leh* (咧)

A: *I koh leh tián-hong-sîn --ah.* (TSM)

he again PROG show.off ASP

伊 閣 咧 展風神 矣

'He is showing off again.'

B-1: *Láu-sit-kóng i sī leh tshàu-phui án-tsuánn?!*

frankly he SI LEH flatter.oneself how

老實講 伊 是 咧 臭屁 按怎

'Frankly, what the heck does he flatter himself for?'

B-2: **I sī leh láu-sit-kóng tshàu-phui án-tsuánn?!*

he SI LEH frankly flatter.oneself how

伊 是 咧 老實講 臭屁 按怎

(49) *leh* (咧) > evaluative

(context) After a failed assassination, the mastermind hears the news report in A and says B...

A: *Hó-ka-tsài i ū siám ...* (TSM)

fortunately he have dodge

好佳哉 伊 有 閃

'Fortunately he dodged.'

B-1: *Khóo-ònn! I sī leh hó-ka-tsài ū siám án-tsuánn?!*

abominable he SI LEH fortunately have dodge how

可惡 伊 是 咧 好佳哉 有 閃 按怎

'Damned it! How come he fortunately dodged?'

B-2: **Khóo-ònn! I sī hó-ka-tsài leh ū siám án-tsuánn?!*

abominable he SI fortunately LEH have dodge how

可惡 伊 是 好佳哉 咧 有 閃 按怎

(50) *leh* (咧) > evidential

A: *I bîng-bîng sī leh tsau-that --lán.* (TSM)

he evidently SI LEH humiliate we

伊 明明 是 咧 糟蹋 咱

'Evidently he was humiliating us.'

- B-1: *Kuè-hūn! I sī leh bîng-bîng tsau-that lán án-tsuánn?!*
 excessive he SI LEH evidently humiliate us how
 過份 伊是咧 明明 蹣蹣 咱 按怎
 ‘That’s too much! What the heck does he humiliate us for?’
- B-2: **Kuè-hūn! I sī bîng-bîng leh tsau-that lán án-tsuánn?!*
 excessive he SI evidently LEH humiliate us how
 過份 伊是明明 咧 蹣蹣 咱 按怎

(51) *leh* (咧) > epistemic

- A: *In huān-sè sing tsáu --ah.* (TSM)
 they perhaps first run ASP
 佢 凡勢 先 走 矣
 ‘Perhaps they have left.’
- B-1: *In sī leh huān-sè sing tsáu án-tsuánn?!*
 they SI LEH perhaps first run how
 佢 是咧 凡勢 先 走 按怎
 ‘How come have they left before for!?’
- B-2: **In sī huān-sè leh³ sing tsáu án-tsuánn?!*
 they SI perhaps LEH first run how
 佢 是凡勢 咧 先 走 按怎

From the examples above, we learn that this usage of *leh* (咧) precedes evaluatives, evidentials, and epistemics, except in cases with speech act adverbials.

The following sets of instances demonstrate where this *leh* (咧) occurs relative to repetitive adverbs and subject-oriented adverbs.

(52) *leh* (咧) > repetitive

- a. *Tsuí-sūn sī leh tit-tit puáh-tó án-tsuánn?!* (TSM)
 Tsuisun SI LEH incessantly fall how
 水順 是咧 直直 跋倒 按怎
 ‘How come Tsuisun keeps on falling!’
- b. **Tsuí-sūn tit-tit sī leh puáh-tó án-tsuánn?!*
 Tsuisun incessantly SI LEH fall how
 水順 直直 是咧 跋倒 按怎

(53) *leh* (咧) > subject-oriented

- a. *Tsuí-sūn sī leh gōng-gōng-á hông phiàn án-tsuánn?!* (TSM)
 Tsuisun SI LEH stupidly PASS cheat how
 水順 是咧 蠢蠢仔 予人騙 按怎!
 ‘How come Tsuisun was fooled so stupidly!’

- b. **Tsuí-sūn gōng-gōng-á sī leh hông phiàn án-tsuánn?!*

Tsuisun stupidly SI LEH PASS cheat how

水順 蠢蠢仔 是咧 予人騙 按怎

The pairs of contrasts above illustrate that the usage of *leh* (咧) is higher than both repetitive and subject-oriented adverbs.

To conjoin the two hierarchies obtained so far, we compare the relative positions between epistemics and subject-oriented adverbs below.

- (54) epistemic > subject-oriented

- a. *Tsuí-sūn huān-sè gōng-gōng-á tuè lāng khi --ah.* (TSM)

Tsuisun perhaps stupidly follow person go ASP

水順 凡勢 蠢蠢仔 綴 人 去 矣

‘Perhaps Tsuisun has stupidly followed them.’

- b. **Tsuí-sūn gōng-gōng-á huān-sè tuè lāng khi --ah.*

Tsuisun stupidly perhaps follow person go ASP

水順 蠢蠢仔 凡勢 綴 人 去 矣

Based on (54), we can confirm Ernst’s (2014) observation between epistemics and subject-oriented adverbs.

In sum, we pinpoint the usage of *leh* in (55).

- (55) Speech act > *leh* > Evaluative > Epistemic > Subject-oriented > Manner

The position pinpointed above not only informs us its height of syntax but also evidences that this *leh* is not a progressive aspect that is supposed to be in the TP domain.

Having *sī leh* as the contributors of the negative orientation that the speaker is unpleasant by the propositional content in mind, we now turn to identify *sī* in this construction, in order to isolate the denotation of *leh*.

3.2 The role of *sī*

Regarding the usage of *sī* in this construction, it is noteworthy that this construction is a special *wh*-question in Obenauer (2004). Interestingly enough, it has long been observed in MC that the presence of *shì*, the counterpart of *sī*, can cause the intervention effect in a *wh*-question (Cheng & Rooryck 2002; Soh 2005; Tsai 2008; Yang 2008), illustrated as follows:

- (56) a. **Shì Zhāngsān wèishénme /zěnmē cízhí?* (Yang 2008: 9 (16a) and (17a); MC)
 be Zhangsan why /how resign
 是 張三 為什麼 /怎麼 辭職
 (Intended) ‘Why/how is it such that it was Zhangsan who resigned?’
 b. **Shì Zhāngsān chī-le shénme?*
 be Zhangsan eat-*PFV* what
 是 張三 吃了 什麼
 (Intended) ‘What was x such that it was Zhangsan who ate x?’

As shown above, when *shì* occurs at the very beginning of a *wh*-question, the sentence is out because of intervention effect (see Yang 2008 for a detailed discussion). However, if we put *shì* in a lower position, the grammaticality would improve obviously, as exemplified below:

- (57) ?*Zhāngsān shì chī-le shénme?* (MC)
 Zhangsan be eat-*PFV* what
 張三 是 吃了 什麼
 ‘What did Zhangsan eat?’

In (57), *shì* is adjoined to *vP*, and only the weak intervention effect is observed. For readers who speak Taiwanese Mandarin, this sentence may even be judged perfect, contrary to MC speakers from other places. In fact, the inconsistency of judgment reflects the grammaticality of the corresponding TSM example below:

- (58) *Tsuí-sūn sī tsiáh siánn?*
 Tsuisun *SI* eat what
 水順 是 食 啥
 ‘(I suppose Tsuisun ate something). What did Tsuisun eat?’

Note that (58) is grammatical without the assistance of extra intonation or stress; unlike (57), which may take off the weak intervention effect by putting stress on the *wh*-object or adding an additional adverbial *dàodǐ* ‘*wh*-hell’ to emphasize its de-D-linking effect (Tsai 2012). As for the interpretation of (58), native speakers’ intuition is that it is employed when the inquirer has already known (or believes) that the event in question did happen, and he is curious about the details.

The additional connotation contributed by this *sī* can be demonstrated in the following way.

Imagine A was told that B got up very late this morning and speculated that B had no time for breakfast before rushing to the office. A met B in the entrance and said:

- (59) *Lí tsái-khí tsiáh siánn? Lóng bô tsiáh honnnh?! (TSM)*
 you morning eat what all NEG eat Q
 你 早起 食 啥 攏 無 食 乎
 'What did you eat this morning? You ate nothing, right?'
- (60) *Lí tsái-khí sī tsiáh siánn? # Lóng bô tsiáh honnnh?! (TSM)*
 you morning SI eat what all NEG eat Q
 你 早起 是 食 啥 攏 無 食 乎
 '(I suppose you ate something this morning.) What did you eat this morning?
 # You ate nothing, right?'

A typical *wh*-question like the one in (59) is fine with a succeeding rhetorical question which presupposes the addressee ate nothing, whereas the same rhetorical question becomes infelicitous in (60) because the *wh*-question contains an additional *sī*, which adds an additional presupposition that the eating event happened. With the contrast, we can confirm the native speakers' intuition of the usage of *sī* in a TSM *wh*-question.

Up to now, we have seen that, unlike *shì* (是) in MC, which triggers the intervention effect even when it is placed intra-sententially that can only be diminished by stress or additional adverbials, *sī* (是) in TSM does not trigger an intervention effect at all when used in a *wh*-question intra-sententially. Moreover, it brings up a D-linking construal. Thus the question is: what is this *sī*?

Fortunately, this kind of linguistic function is not unique in TSM. We found that this usage of *sī*, as described and tested above, meets the description of dictum focus in Creswell (2000). In Creswell's words, dictum focus is used to indicate that certain information expressed in an utterance must already be part of the common ground of the discourse; moreover, according to Creswell, when dictum focus is involved, the denotation of a *wh*-question must already be part of the context set. As emphasized by Creswell, dictum focus does not just mark the denotation of its clause as old, but rather it signals the presupposed quality of the propositional content of the speech act; that is to say, dictum focus signals the presupposedness of the propositional content of the speech act the speaker is making.

Creswell illustrates it with the example below (Creswell 2000: (15)):

- (61) A.1 Okay, did they tell you our topic?
 B.2 Uh, no, somebody else answered the phone and put my number in.
 A.3 Okay, it's, uh
 B.4 Uh, **what IS the topic?**
 A.5 The topic is cars. What kind of car will you buy next, and what kind of decision you'd, do you think about getting, you know, pick that car out and, uh, and why.

As pointed out by Creswell (2000), by uttering the question in B.4, the speaker expects the hearer to accommodate the missing presupposition, which in this case is the proposition content of the *wh*-question.

3.3 Summary

By identifying the usage of *sī* in a *wh*-question as a marker that signifies the denotation of the *wh*-question as already part of the context set, and also by considering the *sī leh* sequence as the contributor of the negative orientation that the speaker is unpleasant by the propositional content in mind, we are now able to isolate the function of the non-aspect *leh*, which is responsible for the unpleasant attitude of the speaker.

Furthermore, we see that it is easy to confound the non-aspect *leh* with its homonym, the progressive aspect marker. If we assume this non-aspect *leh* is a product of grammaticalization from the progressive aspect *leh*, which gives rise to a temporally continuative reading, it is conceivable that the non-aspect *leh*, retaining the core continuative semantics, shifts from the TEMPORAL SPACE (TP) to the COGNITIVE/DISCOURSAL SPACE (CP) and denotes a prolonged negative impact of the proposition.

Having combined the meaning of *sī* and *leh*, we then obtain a clearer idea of the role played by the *sī leh* sequence. First, the speaker marks the post-verbal *how* question with *sī* to make the *wh*-question's denotation presupposed, in a sense that the speaker adds a connotation: "It has happened. Don't deny it and don't tell me whoever has done it did not do it." Second, with *leh*, the speaker labels the proposition prolonging and negative. As a result, we have a causal-*how* question that conveys a speaker attitude with a negative orientation.

4. The analysis

Up to now, we have resolved the puzzles behind the crucial parts of the construction in question, including the usage of post-verbal *how* and the functions of the *sī* and *leh*. Before we propose our analysis, there is one more thing to bring to the reader's notice: obligatory NP preposing to the left of *sī* and the priority of the grammatical subject.

To make a grammatical post-verbal *how* question with a speaker attitude of negative orientation, there is an obligation for an NP to precede the sequence of *sī leh*. Moreover, not all NP can fill this slot. By way of example:

- (62) a. **Sī Tsuí-sūn /i leh khàu án-tsuánn?!* (TSM)
 SI Tsuisun /he LEH cry how
 是水順 / 伊咧 哭 按怎
 (Intended) ‘What the heck Tsuisun/he is crying for?’
- b. *Tsuí-sūn /i sī leh khàu án-tsuánn!*
 Tsuisun /he SI LEH cry how
 水順 / 伊是咧 哭 按怎
 ‘What the heck Tsuisun/he is crying for?’
- c. **Sī leh³ tsit-má /tann khàu án-tsuánn?!*
 SI LEH now /now cry how
 是咧 這馬 / 今 哭 按怎
 (Intended) ‘Why the heck is he crying now?’
- d. *Tsit-má /tann sī leh khàu án-tsuánn?!*
 now /now SI LEH cry how
 這馬 / 今 是咧 哭 按怎
 ‘Why the heck is he crying now?’
- e. *Sī leh háu án-tsuánn?!*
 SI LEH cry how
 是咧 吼 按怎
 ‘Why the heck is he crying?’
- f. *Sī leh bô-tāi-bô-tsi khàu án-tsuánn?!*
 SI LEH without.reason cry how
 是咧 無代無誌 哭 按怎
 ‘Why the heck is he crying? (It makes no sense!)’
- g. *Bô-tāi-bô-tsi sī leh khàu án-tsuánn?!*
 without.reason SI LEH cry how
 無代無誌 是咧 哭 按怎
 ‘Why the heck is he crying? (It’s totally unreasonable!)’

As illustrated in (62a) and (62c), when there is only one NP in the sentence, the NP cannot be left behind *sī*, whether the NP is the grammatical subject or not. Only when there is no overt NP, the slot preceding *sī* (是) can be left unfilled (like (62e), probably occupied by a null topic). Moreover, the grammaticality of both (62f) and (62g), and the contrast between (62c) and (62d), indicate that adverbials are not required to be fronted, unlike NP adjuncts where the NP adjunct occurs without the other overt NP.

Furthermore, grammatical subjects are prioritized to be preposed in contrast to other NPs. See the following examples:

- (63) a. **E-poo sī leh Tsuí-sūn khàu án-tsuánn?! (TSM)*
afternoon SI LEH Tsuisun cry how
下晡 是咧 水順 哭 按怎
(Intended) ‘This afternoon, why the heck was Tsuisun crying?’
- b. *?Tsuí-sūn sī leh e-poo khàu án-tsuánn?! (TSM)*
Tsuisun SI LEH afternoon cry how
水順 是咧 下晡 哭 按怎
‘Why the heck was Tsuisun crying in the afternoon?’
- c. *E-poo Tsuí-sūn sī leh khàu án-tsuánn?! (TSM)*
afternoon Tsuisun SI LEH cry how
下晡 水順 是咧 哭 按怎
‘This afternoon, why the heck was Tsuisun crying?’
- d. *Tsuí-sūn e-poo sī leh khàu án-tsuánn?! (TSM)*
Tsuisun afternoon SI LEH cry how
水順 下晡 是咧 哭 按怎
‘Why the heck was Tsuisun crying this afternoon?’

When there is an overt grammatical subject, as in (63a), preposing the nominal temporal adjunct does not salvage the sentence. However, nominal adjuncts can be optionally preposed when the grammatical subject precedes the *sī leh*³ (是咧) sequence, as is shown in (63c) and (63d).

We suggest accounting for this phenomenon by using Rizzi’s (2004) criterial positions. Along this line of reasoning, it is a peripheral feature under a projection that requires the most prominently specific element to fill its specifier position.

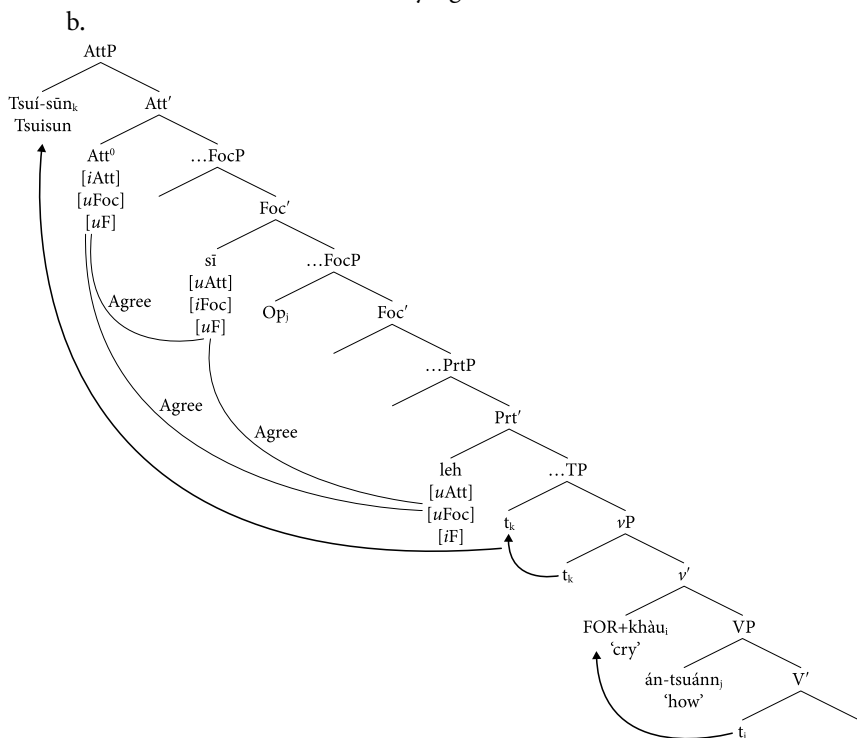
In § 2.2 and § 2.3, we have seen that the post-verbal *how* is a replacement of *what* and both *how* and *what* can serve to make the construction with which we are concerned without any differences (see (17) and (18)). Based on Tsai’s (1994; 1999) proposal – that in-situ *wh*-nominals are licensed through unselective binding – we further propose that the element is bound by an operator at the specifier of FocP relevant to the question forming. On the other hand, the post-verbal position of the *wh*-element can be analyzed by moving the verb to the covert light verb, *for*, which gives rise to the causal inquiring meaning (following Lin 2001).

We have seen in (12) that *sī* and *leh* can be intervened by an adverb. We therefore have to take each of them independently. Nonetheless, it is also true that they interact with each other closely (see (9) and (10) and the discussion therein). Based on these observations we assume that they are in an Agree relationship. Above all, an attitudinal head is responsible for the additional speaker attitude of negative orientation (refer to Huang & Ochi 2004; Chou 2012; Paul 2014, 2015; Pan 2015; Pan & Paul 2016). To string the attitudinal head, *sī*, and *leh*, which

Our analysis of the complaining post-verbal *how* question is exemplified below:

- Tsuisun SI LEH cry how
水順 是咧 哭 按怎

‘What the heck is Tsuisun crying for?’



As mentioned above, we adopt a light verb analysis in the lower part of (64b) (Lin 2001). The verb is externally merged with a covert light verb, *for*, to derive the basic causal meaning. Moreover, the *án-tsuánn* ‘how’ is bound by an operator at the spec of a lower FocP.¹⁰ In the fashion of multiple Agree proposed by Hiraiwa

10. We thank an anonymous reviewer for pointing out that the focus operator for *wh* cannot be under the spec of the focus head $\bar{s}I$ without mutual interaction between these two. We propose there are two focus projections that accommodate these two elements respectively. There is evidence showing that two focus projections of different kinds can realize in one TSM sentence, as exemplified below:

(2001), both the Foc^0 (*sī*) and *leh*, carrying an uninterpretable Att feature (attitudinal feature), serving as the Goals Agreed with AttP^0 , which is the Probe that values Att feature to the two Goals. Conversely, the two Goals value their value to the Att^0 respectively. Meanwhile in the same scheme, the head of the higher FocP , *sī*, also works as the Probe in Agree with *leh* as its goal, and the two value each other. Within this framework, we then explain the collaboration between these two elements, a dictum focus marker and a marker indicating a negatively prolonging proposition, and the speaker attitude derived from this collaboration. As for the grammatical subject, under the VP-internal Subject Hypothesis, the subject is externally merged under Spec.vP before it moves to Spec.TP and, finally, it lands at AttP.Spec due to the obligatory preposing triggered by the peripheral feature under AttP .

An anonymous reviewer asks, under this analysis, why *án-tsuánn*, a *how* *wh*-word, remains in VP. Should it not raise or be linked to somewhere high in order to generate the special attitude of the question? Based on our observation from (44) to (47), a sentence containing a post-verbal *wh*-word can be either neutral or convey an extra speaker attitude. The attitude is optional, depending on the intonation. However, when the same sentence is accompanied by the sequence of *sī leh*, the optionality simply disappears; that is to say, a question contains both the sequence of *sī leh* and a post-verbal *wh*-word must convey the speaker attitude. Due to this dichotomy, we attribute the attitude to the collaboration among a covert attitudinal head (Att^0), *sī*, and *leh*, as illustrated in (64). By doing so, the post-verbal *wh*-word contributes nothing but the causal reading with a covert light verb *for* at work.

Just as pointed out by another anonymous reviewer, under this analysis, the post-verbal *how* has nothing to do with *sī* and *leh* since they do not interact with each other.¹¹ Therefore, we may expect that without *án-tsuánn* ‘how’ the sentence is still fine and the speaker negative attitude still holds. The example below bears out this expectation.

- (i) *A-bīng sī huān-sè sī bīn-à-tsài beh khi Tâi-pak.* (Lau 2017: 69 (33b))

A-bīng BE perhaps BE tomorrow will go Taipei

阿明 是 凡勢 是 明仔載 欲 去 台北

‘(We know that) it might be the case that it’s tomorrow that Abing will go to Taipei.’

11. Readers may refer to § 2 and § 3. In fact, this is exactly the conclusion we reach in each of those two sections.

- (65) *Tsuí-sūn sī leh!* (TSM)
 Tsuisun SI LEH
 水順 是咧
 ‘What the hell? (What Tsuisun does (did) is bothering!)’

The sentence in (65) is a truncated version of (64). Without the verb and the post-verbal *how*, which collaborate to produce the causal *how* meaning, the sentence is still grammatical, and it only conveys a speaker-oriented complaining tone without an interrogative sense that seriously solicits information.

5. Concluding remarks

Setting out from a specific construction that is only found in TSM but not in MC, we have looked into the same and different properties of *how* and *why* between TSM and MC. Based on these observations, and the investigation into the specific usages of *sī* and *leh*, we propose an analysis for the post-verbal *how* question with speaker attitude of negative orientation. According to our analysis, the formation of this complaining *how* construction is not a simple product of a single element, but a composition of the functional ingredients and the unique usage of *how* in TSM.

If our analysis is on the right track, this construction illustrates the high analyticity and the topic-prominency of TSM, which has long been observed in the syntax literature of Sinitic languages.

Finally, as a language enriched with overt elements denoting discourse- and speaker-oriented construals (for example, the *sī* and *leh* in this study), TSM deserves further in-depth examination by those who are interested in the syntax-pragmatics interface.

Acknowledgements

The author names are arranged in alphabetical order. Early versions of this paper were presented in IACL-22 & NACCL-26 (2014, University of Maryland).

Our research is funded by the Ministry of Science and Technology of Taiwan (MOST 103-2410-H-007-026-MY3).

Abbreviations

ASP	aspect	PFV	perfective
CL	classifier	PROG	progressive aspect
CP	COGNITIVE/DISCOURSAL SPACE	PRON	pronoun
DEM	demonstrative	PTC	particle
EXCL	exclamation	Q	question particle
LK	linker	RES	resultative marker
MC	Mandarin Chinese	SDQs	surprise-disapproval questions
NEG	negation	TP	TEMPORAL SPACE
PERF	perfect	TSM	Taiwan Southern Min

References

- Cheng, Lisa Lai-shen & Rooryck, John. 2002. *Types of wh-in-situ*. Leiden: Leiden University. (Manuscript.)
- Chhoa, Poe-hoe. 1969. *Guoyu Minnanyu duizhao changyong cidian* [A comparative Mandarin-Southern Min dictionary of frequently used expressions]. Taipei: Cheng Chung Book Co., Ltd.
- Chou, Chao-Ting Tim. 2012. Syntax-pragmatics interface: Mandarin Chinese *wh-the-hell* and point-of-view operator. *Syntax* 15(1). 1–24. <https://doi.org/10.1111/j.1467-9612.2011.00157.x>
- Creswell, Cassandre. 2000. The discourse function of verum focus in wh-questions. In Hirotani, Masako & Coetzee, Andries & Hall, Nancy & Kim, Ji-yung (eds.), *NELS 30: Proceedings of the 30th Conference of the North East Linguistic Society*, vol. 1, 165–179. Amherst: GLSA.
- Douglas, Carstairs. 1873. *Chinese-English dictionary of the vernacular or spoken language of Amoy, with the principal variations of the Chang-Chew and Chin-Chew dialects*. London: Trübner. (with *Supplement to dictionary of the Amoy colloquial language* by Barclay, Thomas.)
- Embree, Bernard L.M. 1973. *A dictionary of Southern Min: Based on current usage in Taiwan and checked against the earlier works of Carstairs Douglas, Thomas Barclay, and Ernest Tipson*. Hong Kong: Hong Kong Language Institute.
- Ernst, Thomas. 2014. *The syntax of adverbs*. In Carnie, Andrew & Sato, Yosuke & Siddiqi, Daniel (eds.), *The Routledge handbook of syntax*, 108–130. New York: Routledge.
- Hiraiwa, Ken. 2001. Multiple agree and the defective intervention constraint in Japanese. In Matushansky, Ora & Costa, Albert & Martin-Gonzalez, Javier & Nathan, Lance & Szczegielniak, Adam (eds.), *Proceedings of the 1st HUMIT Student Conference in Language Research (HUMIT 2000)* (MIT Working Papers in Linguistics 40), 67–80. Cambridge: MITWPL.
- Huang, James C.-T. 1982. *Logical relations in Chinese and the theory of grammar*. Cambridge: MIT. (Doctoral dissertation.)
- Huang, C.-T. James & Ochi, Masao. 2004. Syntax of the hell: Two types of dependencies. In Keir, Moulton & Wolf, Matthew (eds.), *NELS 34: Proceedings of the 34th Conference of the North East Linguistic Society*, 279–293. Amherst: GLSA.

- Lau, Seng-hian. 2017. Taiwanese *Si* “BE” as a common ground marker. *Monumenta Taiwanica* 16(2). 49–83.
- Lin, Jonah T.-H. 2001. *Light verb syntax and the theory of phrase structure*. Irvine: UC Irvine. (Doctoral dissertation.)
- Lu, Guang-cheng. 2012. *Shiyong Taiyu cidian*. [A practical dictionary of Taiwanese]. Taipei: Wenshui Arts and Cultural Enterprise Co. Ltd.
- Obenauer, Hans-Georg. 2004. Nonstandard *wh*-questions and alternative checkers in Pagotto. In Lohnstein, Horst & Trissler, Susanne (eds.), *The Syntax and semantics of the left periphery* (Interface Explorations 9), 343–384. Berlin: Mouton de Gruyter. <https://doi.org/10.1515/9783110912111.343>
- Ogawa, Naoyoshi (ed.). 1931–1932. *Tai-Nichi dai jiten* [Comprehensive Taiwanese-Japanese dictionary]. Taipei: Government-General of Taiwan.
- Pan, Victor Junnan. 2015. Mandarin peripheral construals at the syntax-discourse interface. *The Linguistic Review* 32(4). 819–868. <https://doi.org/10.1515/tlr-2015-0005>
- Pan, Victor Junnan & Paul, Waltraud. 2016. Why Chinese SFPs are neither optional nor disjunctors. *Lingua* 170. 23–34. <https://doi.org/10.1016/j.lingua.2015.10.005>
- Paul, Waltraud. 2014. Why particles are not particular: Sentence-final particles in Chinese as heads of a split CP. *Studia Linguistica* 68(1). 77–115. <https://doi.org/10.1111/stul.12020>
- Paul, Waltraud. 2015. *New perspectives on Chinese syntax*. Berlin: De Gruyter Mouton. <https://doi.org/10.1515/9783110338775>
- Rizzi, Luigi. 2004. *On the form of chains: Criterial positions and ECP effects*. Siena: University of Siena. (Manuscript.)
- Soh, Hooi Ling. 2005. WH-in-situ in Mandarin Chinese. *Linguistic Inquiry* 36(1). 143–155. <https://doi.org/10.1162/ling.2005.36.1.143>
- Stepanov, Arthur & Tsai, Wei-Tien Dylan. 2008. Cartography and licensing of *wh*-adjuncts: A cross-linguistic perspective. *Natural Language & Linguistic Theory* 26(3). 589–638. <https://doi.org/10.1007/s11049-008-9047-z>
- Tiuⁿ, Jūhông. 2009. *TJ Taiyu baihua xiao cidian*. [TJ’s dictionary of non-literary Taiwanese]. Tainan: Asian A-Tsiu International.
- Tsai, Wei-Tien Dylan. 1994. On nominal islands and LF extraction in Chinese. *Natural Language & Linguistic Theory* 12(1). 121–175. <https://doi.org/10.1007/BF00992747>
- Tsai, Wei-Tien Dylan. 1999. On lexical courtesy. *Journal of East Asian Linguistics* 8(1). 39–73. <https://doi.org/10.1023/A:1008354312243>
- Tsai, Wei-Tien Dylan. 2008. Left periphery and *how-why* alternations. *Journal of East Asian Linguistics* 17(2). 83–115. <https://doi.org/10.1007/s10831-008-9021-0>
- Tsai, Wei-Tien Dylan. 2012. *Lun judiao zhongyin dui yufa quanshi jizhi de yingxiang* [On the influences from intonation and stress on the syntactic interpretation]. Hsinchu: National Tsing Hua University. (Manuscript.)
- Yang, Barry C.-Y. 2008. *Intervention effects and the covert component of grammar*. Hsinchu: National Tsing Hua University. (Doctoral dissertation.)

Authors' addresses

Seng-Hian Lau (corresponding author)
Department of Taiwan Culture, Languages and Literature
National Taiwan Normal University
No. 162, Heping E. Rd., Sec. 1
Da'an Dist., Taipei City, 10610
Taiwan
senghian@ntnu.edu.tw

Publication history

Date received: 17 November 2016
Date accepted: 15 May 2018
Published online: 2 April 2020