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海圖新繪：從句法—語用介面看台灣閩南語的製圖分析

Charting the High Seas: A Cartographic View of Taiwanese Southern Min from the Syntax–Pragmatics Interface

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Charting the High Seas:
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by

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ABSTRACT

With the introduction of the Cartographic Approach (Rizzi 1997; Cinque 1999), syntacticians now have a new perspective in exploring the syntax–pragmatics interface. Well-known by its more analytic strategy to represent the scope relation, since then, Mandarin Chinese (MC) has played a crucial role in depicting the syntactic topography for its strict syntax–semantics correspondence encoded by the notion "the height of interpretation." Nonetheless, Taiwanese Southern Min (TSM), an even more analytic member in the East Asian languages, has drawn much less attention so far.

Thanks to its strong analyticity, TSM furnishes overt function words, which are discourse-oriented and have no counterparts in MC; therefore, this provides convenient access to extend our research into the far left periphery, the uncharted seas seating the syntax–pragmatics interface.

By looking into the four elements with six usages in total, I demonstrate how vividly the language incarnates the interactions between speaker and hearer, not-at-issue and at-issue content, common ground and new information, and topics and evidentiality.

At the uppermost positions, *leh*^{1} (咧) and *leh*^{2} (咧) realize the heads of SA shell, and the projection embodies the interplay between the speaker and the addressee (Speas & Tenny 2003). Unlike previous studies that claim the discovery of a lexical item under this projection (Hill 2007; Haegeman & Hill 2011, 2013; Haegeman 2014), *leh*^{1} (咧) and *leh*^{2} (咧) have nothing to do with vocative, which is supposed hierarchically lower; instead, these two elements are intertwined with the speaker's and the hearer's concern with respect to the proposition. With these two best candidates that illustrate the existence of the SA shell, TSM, to my knowledge, is a real Speas-Tennian language. In addition to the syntax and semantics of *leh*^{1} (咧) and *leh*^{2} (咧), I also point out another usage of *leh* (*leh*^{3}), which is lower and interacts with the dictum focus marker in a rhetorical question conveying the speaker's attitude. The particle *leh* (咧), with a series of usages from low to high, derived from a process of grammaticalization exemplifies the nullification of Transparency Principle (Lightfoot 1979; cf, Tsai 2015a).

Albeit *shì* (是) ‘be’ in MC has been rather investigated since the early days of Sino-Tibetan linguistics—probably due to neglect of the language in question and its colloquial register—the two usages of *sī* (是) ‘be’ focused on in this thesis have never been mentioned in the literature. As another instance of violating the Transparency Principle, the word is now employed as a dictum focus and a commenting verum focus marker in TSM, in addition to its well-known copular usage and the disputed focus marking cognates. With the fact that it functions to emphasize the not-at-issue comment from the speaker, the data constitutes a challenge against the camp, which suggests the analysis of all its occurrences as copulas in a unified fashion (e.g., Cheng 2008).

Also frequently found in daily conversation, the sentence-initial *ah* (啊) is carefully examined herein. Unlike other introductory elements, this element is conditioned both discoursally and syntactically. Only second to the speech act (SA) shell, it bridges the antecedent sentence or the context and the following sentence. Additionally, it requires a contrast between the two bridged by itself. This element, once again, illustrates how syntax and pragmatics collaborate and actualize this collaboration in lexical items.

Last, a chapter is devoted to the enquiry into the distribution and derivation of the evidential *bô* (無), a particle whose occurrences found not only at the sentence-final position but across the sentence. Empirically, if the generalizations are correct, we have found a counterpart of mutual knowledge evidentials in an East Asian language (Hintz & Hintz 2017). Even more interestingly, this particle may trigger the topicalization of part of or the whole sentence based on the speaker’s judgment regarding which part of the proposition is noticeable by the addressee in the context, under the notion of discourse topic (cf. QUD; question under discussion). Because the main motivation of this preposing is more about establishing or confirming the current discourse goal that determines what is relevant, unsurprisingly, the element is also pinpointed in the far left periphery as the last piece of the jigsaw is worked out in the thesis.

ABSTRACT (Mandarin)

隨著製圖理論（Rizzi 1997；Cinque 1999）的出現，句法學家得以另闢蹊徑，向句法—語用界面展開新一輪的探索。而華語因著在範域關係上呈現高度分析性，具有「句法上的詮釋高度」與「句法—語意對應」之間相對嚴謹的關係，始終於描繪句法分佈上扮演著重要角色；然而，同樣身為東亞語言，分析性更強的台灣閩南語，則未受到同等的關注。

事實上正因其分析性有過之而無不及，台灣閩南語有著許多與語境相關連的顯性功能詞，而這些功能詞在華語中不見得能找到對應詞，由此，台灣閩南語乃為進一步探索句法—語用界面所處的句法左緣結構開了一扇方便之門。

藉由對四個詞項、六個用法的探究，我們得以看見台灣閩南語如何鮮活地將說話者與聽話者、非核心語意與命題層次、共知背景與新訊息、話題與示證性之間的互動在詞項中具體呈現。

以句法階層位置上最高的「咧 [1]」與「咧 [2]」來說，這兩個詞項將代表說話者與聽話者之間互動的言語行為殼結構的兩個主要語顯性化（Speas & Tenny 2003），不同於前人對於此一功能投射之下詞項的觀察（Hill 2007; Haegeman & Hill 2011, 2013; Haegeman 2014），「咧 [1]」與「咧 [2]」與句法結構上較低的呼格無關，甚且，這兩個詞項體現了說話者與聽話者同命題的攸關性，是目前所知在實證上最具說服力的言語行為殼結構的顯性成份，就此，我們可說台灣閩南語是貨真價實的 Speas-Tennian 語言。除了提供「咧 [1]」與「咧 [2]」的句法及語意分析，本論文並指出另一個位置較低，需與言明焦點共現，且只用於帶說話者特殊態度反詰問句的另一用法：「咧 [3]」；經由這些觀察，我們得見功能詞「咧」因著語法化所衍生由低到高的不同用法，再次驗證透明原則在自然語言不具普遍性（Lightfoot 1979；參見 Tsai 2015a）。

早在漢藏語言研究發軔之初，關於華語「是」的研究就如雨後春筍般相繼問世，但本論文所提出「是」的兩個用法，或因對台灣閩南語的相對忽視，又或因此二用法的口語性質，在文獻中未見討論。除了前人所指出各種「是」的用法之外，本論文點出台灣閩南語且將「是」用做言明焦點標記與評論肯定

焦點標記；而說話者可藉由「是」來強調非核心語意的用法，則對主張「是」應一律視為繫詞以達成一致性分析的陣營帶來挑戰（如 Cheng 2008）。

同樣常見於日常口語，句首的「啊」在本文中也得到了詳細的檢視及說明，尤其重要的是，本論文主張台灣閩南語句首的「啊」，並非一般所謂單純的「發語詞」，事實上，這個成份的使用是有其語境與句法條件的。在階層位置上，句首的「啊」僅只低於言語行為殼結構，一旦使用，便或是將前句，或是將語境當中的內容，與後句相互接合，與此同時，並要求兩方的內容具備對比性質。一如前面所提到的其他詞項與用法，句首的「啊」再次例示了句法與語用如何相輔相成，並將其交互作用於詞項中具現。

論文的最後一章探討了示證性「無」的分佈與運作，這個功能詞不只常見於句末，更能在句首及句中使用，如果我們對相關現象的歸納無誤，則這個示證性的「無」將是首個於東亞語言當中發掘的共有知識示證詞（Hintz & Hintz 2017）。功能之外，在句法上，由於此一詞項在句中的位置，取決於說話者對命題各部份內容，在語篇話題（亦即 QUD）的觀念上，基於語境中該內容是否為聽話者所注意到而做出的判斷，所進行部份或全部內容的話題化移位；換言之，其移位動機，在於建立或確認當前的語篇目標，而語篇目標所決定的，正是命題中各部份內容的相關性高低。至此，我們藉由以上各個功能詞，標定了左緣結構上的一些位置，可做為日後進一步研究的參考點。

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寫 kah tsia，有較長--ah，毋知 kám 有落勾啥人？若有，請原諒我 tsiah 無頭神… 不管你 beh 信毋信，窮實我是刁工無愛寫--ê，就是 beh 等你家己開喙來問，我 thang 好請你食腥臊--ê，你想，按呢 kám 無較好？

LIST OF ABBREVIATIONS

1SG: first person singular pronoun

2SG: second person singular pronoun

3SG: third person singular pronoun

AFF: affective

ASP: grammatical aspect

ASS: assertive

CL: classifier

DISP: disposal

DMT: diminutive

EMP: emphatic

FOC: focus marker

GOAL: goal marker

IE: introductory element

LK: linker

NEG: negation

NMLZ: nominalizer

PASS: passive

POSS: possessive

PREP: preposition

PRT: particle

Q: question particle

RES: resultative

TAG: tag question

TOP: topic marker

CONTENT

CHAPTER 1 INTRODUCTION

As Kempson (2012: 530-531) notes, since Lewis (1970), one of the novel objectives in linguistics in the early 1970s was to reflect the way in which understanding words in a combination systematically depends on aspects of the context in which they are produced. For example, from then on, semanticists have put forth different proposals to understand a formal articulation of context and how meanings of expressions combine to determine context-dependent interpretability (Lewis 1970; Kamp 1981; Kaplan 1989a; Kamp and Reyle 1993; and many others). After decades of pursuit, it emerged that the more we understand the systematicity of context dependence displayed by natural languages, the harder it becomes for us to clearly distinguish data within the remit of grammar to explain the context. With the data revealed to us, it is impossible to ignore the contexts and the roles in the discourse and still provide an adequate analysis.

Regarding this concern, research is supposed to be even more critical when it comes to East Asian languages. For it is well-known that most East Asian languages, including languages in the Mainland Southeast Asia linguistic area, are discourse-oriented (refer to Li & Thompson 1976; Tsao 1977; Huang 1984; among many others). Researchers, for example, have attributed the Chinese pro-drop to a covert topic (e.g., Huang 1984; Liu 2014) and the apparent loose argument structure of Mandarin Chinese (henceforth MC) to its topic–comment characteristic (Li & Thompson 1976; Tsao 1977). Furthermore, since the inception of the Cartographic Approach (Rizzi 1997; Cinque 1999), due to the aforementioned discourse-centric hallmark, Sinitic languages have become one of the main arenas for pinpointing new syntactic positions in peripheries, especially the CP domain, where the syntax–pragmatics interface bears on.

Until now, though we already have better understanding of the interaction between syntax and pragmatics, there is still uncharted space to look into. This frontier expands above the ForceP of the matrix sentence, where the performativity of the speaker and the addressee is realized.

It is this uncharted space that the study aims to analyze. By investigating the elements with performativity and relevant to the speaker's attitude and the involvement

of other participants in the discourse, I would like to depict the far left borderland of syntax.

Unlike the topic and focus, the elements aimed at in this dissertation have drawn relatively less (or even no) attention in the past. As noticed by Coniglio and Zegrean (2012) in their study of discourse particles, these elements only demonstrate their importance evidently in spontaneous speech. Though they are rarely found in written language, they turn out to be widely used in spoken language to make an utterance sound more natural and expressive (2012:230). In fact, this is part of the reason they can be easily omitted.

In the following, let me briefly introduce the elements in Taiwanese Southern Min (henceforth TSM) that will be looked into in the subsequent chapters.

1.1 The interpolating *leh* (咧)

Traditionally, *leh* (咧)[1] is deemed the TSM counterpart of the progressive aspect marker *zài* (在) in MC. However, it is not difficult to find environments where *leh* does not denote a progressive aspect.

(1) * Tsuí-sūn leh puảh-tó. (TSM)
Tsuisun ASP fall
水順 咧 跋倒。
(Intended) "Tsuisun is falling down."

(2) Context: Tsuí-sūn was on the track to compete for the 200-meter gold medal. His coach had high expectations of him. However, Tsuí-sūn fell accidentally, and the hope of winning was lost. His coach was so disappointed and said the following:
Tsuí-sūn sī leh puảh-tó án-tsuánn!? (TSM)
Tsuisun SI LEH fall how
水順 是 咧 跋倒 按怎！？
"What the heck did Tsuisun fall for!?"

As shown by (1), the sentence is out when *leh* (咧) is used with an achievement predicate, *puảh-tó* "fall," due to their incompatibility. Nonetheless, the occurrence of

[1] This element has variants like *teh* and *tih*. I will use *leh* throughout the dissertation to be consistent and to avoid causing confusion.

leh (咧) and the same predicate does not cause any problem in (2). This contrast evidences the existence of another kind of *leh* (咧), which is not a progressive aspect marker.

Moreover, *leh* (咧) can even be repeatedly interpolated in a colloquial style, as illustrated below.

(3) Guá leh lí leh guā-kháu leh lo̍h-hōo --ah! (TSM)
I LEH you LEH outside ASP rain ASP
我 咧 你 咧 外口 咧 落雨 矣！
"Gosh! You see! It began to rain outside!"

In this example, only the third *leh* (咧) in sequence can be recognized as a progressive aspect marker. The higher two are clearly irrelevant to aspect marking, but function to convey the speaker's attitude and to get some roles in the discourse involved.

Based on these observations, the syntax and functions of *leh*s (咧), which have nothing to do with the progressive aspect, should be accounted for in this study.

1.2 *Be* that is neither a copula nor a typical focus marker

With numerous studies about MC *shì* (是), analyzed either as a copula (e.g., Wang 1937; Chao 1968; Tang 1979), as a focus marker (Lee 2005), or some things else, a tacit consensus is that its counterpart, *sī* (是), in TSM has nothing special worth mentioning or worth looking into. However, it turns out that *sī* (是) cannot be an exact parallel of *shì* (是). This is demonstrated by the following examples.

(1) Lí sī ē-hiáu tshú-lí --bô? (TSM)
you SI can handle Q
你 是 會曉 處理 無？
"Do you know how to handle it after all?"

(2) a.* Nǐ shì huì chǔlǐ ma? (MC)
you be can handle Q
你 是 會 處理 嗎？
(Intended) "Do you know how to handle it after all?"

b.* Nǐ shì huì-bú-huì chǔlǐ?
you be can-NEG-can handle

你　是　會不會　處理？

(Intended) “Do you know how to handle it after all?”

As shown above, for alternative questions, only TSM questions can have *be* preceding the main predicate.

Additionally, the positions accessed only by the TSM *be* is also found in a declarative.

(3) Tsuí-sūn sī huān-sè tsáu khì Ko-hiông --ah. (TSM)
Tsuisun SI perhaps run go Kaohsiung ASP
水順 是 凡勢 走 去 高雄 矣。
“PERHAPS Tsuisun has gone to Kaohsiung.”

(4) * Zhāngsān shì huòxǔ qù Gāoxióng le. (MC)
Zhangsan be perhaps go Kaohsiung ASP
張三 是 或許 去 高雄 了
(Intended) “PERHAPS Zhangsan has gone to Kaohsiung.”

With this contrast and the intuition that it is pertinent to the context, we can’t help but wonder what this *sī* (是) is, and we will explore the answer to it in the designated chapter.

1.3 Sentence-initial *ah* (啊)

Unlike some sentence-initial particles, such as *kóng* (講), initial *ah* (啊) cannot be employed out of the blue. Moreover, it occurs in either a declarative or an interrogative.

(4) A: Tsiânn kú bô khuàinn --ah! (TSM)
very long time NEG see ASP
誠 久 無 看見 矣！
“It’s been a while!”

B1: Ah lí tsit-tsūn teh bô-îng siánn?
AH you this while ASP busy what
啊 你 這陣 咧 無閒 啥？
“(You do not show up as frequently as you used to.) What have you been busy doing recently?”

B2: Ah lí suah jú lâi jú siàu-liân --neh!
AH you unexpectedly more come more young PRT
啊 你 煞 愈 來 愈 少年 呢！
"(In contrast to how you looked,) you look younger and younger!"

In each reply to (4)A, we have *ah* (啊), which occurs in an interrogative in B1 and in a declarative in B2.

The usage of this element is obviously relevant to the context. We would like to learn its meaning, its explicit constraints, and pinpoint it syntactically.

1.4 A negative word that does not negate

In TSM, we have two negative words: *bô* (無) and *m̄* (毋). They are in complementary distribution. Literature on these two is quite abundant; yet, to my knowledge, no literature has touched upon the usages illustrated below (refer to Lien 2015 for an overall investigation into *bô* [無]; for negative markers in TSM, see Li 1971; Cheng 1997b; Lu 1999, 2003; among many others).

(5) a. **Bô** Tsuí-sūn tī Ko-hiông khui tsit king tiàm. (TSM)
BO Tsuisun PREP Kaohsiung open one CL shop
無 水順 佇 高雄 開 一 間 店。
"I know and you also know that Tsuisun is running a shop in Kaohsiung. (Don't tell me you don't know.)"

b. Tsuí-sūn **bô** tī Ko-hiông khui tsit king tiàm.
Tsuisun BO PREP Kaohsiung open one CL shop
水順 **無** 佇 高雄 開 一 間 店。
"Regarding Tsuisun, I know, and you also know, that he is running a shop in Kaohsiung. (Don't tell me you don't know.)"

c. Tsuí-sūn tī Ko-hiông **bô** khui tsit king tiàm.
TSuisun PREP Kaohsiung **BO** open one CL shop
水順 佇 高雄 **無** 開 一 間 店。
"Regarding Tsuisun and what he is doing in Kaohsiung, I know, and you also know, that he is running a shop there. (Don't tell me you don't know.)"

d. Tsuí-sūn tī Ko-hiông khui tsit king tiàm **bô**.
Tsuisun PREP Kaohsiung open one CL shop **BO**

水順　　佇　高雄　　開　一　間　店　**無**。

"Regarding the fact that Tsuisun is running a shop in Kaohsiung, I know it, and you also know it. (Don't tell me you don't know.)"

Among these sentences, notice that (5)b and (5)c are identical to their negative counterparts in both the word orders and the tone sandhi patterns. Moreover, unlike a polar question with a negative sentence-final particle, *bô* (無), which conveys neutralized tone, (5)d has the same negative word pronounced with its full citation tone. In any rate, none of these sentences is negated.

In chapter 6, I will investigate the syntax and semantics of this usage of *bô* (無), respectively.

1.5 Summary

As readers may have noted, none of these elements aforementioned are typical sentence-final particles, though it has been well acknowledged that sentence-final particles—mostly without a denotative or referential meaning—are mainly used to convey emotive and/or epistemic nuances within a particular discourse context (among many others, see Li 2006:1); whereas, their fixed sentence-final linear position and constraints of co-occurrence are inconvenient in our attempt to chart the uncharted topography in the far left periphery. Moreover, unlike sentence-final particles, the elements that are focused on herein have drawn relatively less or even no attention. An adequate investigation into these elements, which are pragmatically sensitive, will undoubtedly shed light on the boundary between syntax and pragmatics.

Before we delve into each element, we will review the literature centering around the syntax–pragmatics interface and the left periphery of TSM (chapter 2). The elements in question will be discussed respectively from chapter 3 to chapter 6. Chapter 7 will conclude the paper.

CHAPTER 2 LITERATURE REVIEW

2.1 An overview

The significance of pragmatic factors for adequately describing/theorizing the domain of syntax has been drawing attention from researchers; for example, Morgan (1975) and Gazdar (1980) evince the pragmatic influence on sentence structure. However, the inclusion of pragmatics into syntactic studies among the generative syntacticians is relatively later than their functionally oriented counterparts, who consider communicative demands the primary motivation for grammar (Fukushima 2006:422).

The major approaches to the syntax–pragmatics interface can be grouped into two general camps. The first is syntactico-centrism, which relegates pragmatics to the status of a secondary linguistic system excluded from the self-contained syntactic component. The second approach is pragmatic-centrism, which relegates syntax to a derivative role and makes pragmatics central. Aside from these two, the syntax–pragmatics alliance, a third approach in which different degrees or depths of interaction between syntax and pragmatics are accommodated has also surfaced, in particular from within the generative orientation (Fukushima 2006:422).

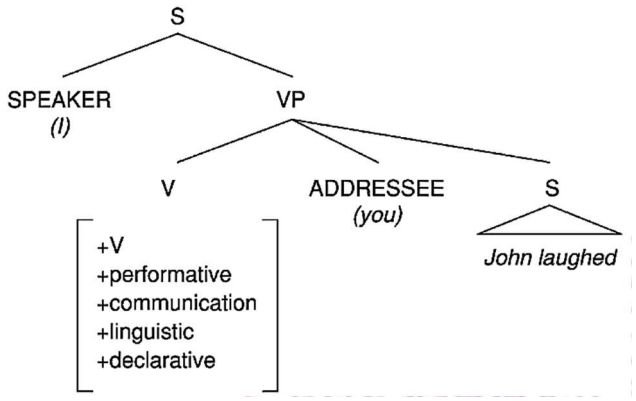
In the camp of the syntactico-centrism, researchers, such as Gazdar and Klein (1977), Chomsky (1986), and Carston (1998), treat pragmatics as a post-grammatical filter. For pragmatics, a placeholder or an agendum is allocated in the syntactic structure or the linguistic inquiry, and it is the language structure and its acquisition that is prioritized. Among them, Carston designated pragmatics as supplying a selection criterion for a particular sentential structure from a set of sentences with equivalent truth conditions based on the amount of "processing effort" in the sense of the Relevance Theory (see 2.2).

The proponents for the centrality of pragmatics can be represented by Givón (1979) and Hopper (1987). According to Givón, it is the loose and paratactic pragmatic discourse structures (the pragmatic mode) that give rise to tight and grammaticalized syntactic structures (the syntactic mode). Hopper takes an even more radical view that grammar is "emergent" in the sense that discourse gives rise to and shapes structure (or regularity) as an ongoing process. For Hopper, an emergent structure is neither

determined nor fixed; it is constantly open and in flux. In this view, grammar is only a name given to certain categories of observed repetitions in discourse.

Apart from the two major camps, proposals for syntax–pragmatics integration emerged in the early days of generative grammar. Among others, Ross's (1970) performative hypothesis suggests that on top of a declarative sentence, there is an extra layer of syntactic projection with a phonetically empty speech act verb taking a null subject (speaker) and object (addressee), as shown in (1). By doing so, Ross attempts to represent pragmatic aspects as syntactic constituents.

(1) A declarative sentence represented in Ross's performative hypothesis (from Fukushima 2006:423 Figure 1).



Ross's idea, though flawed in terms of truth conditions, has been reincarnated in some recent proposals (e.g., Speas and Tenny 2003).

Gordon and Lakoff (1971) adopt conversational postulates as a component for a transderivational rule. According to them, when a relatively short form is derived and uttered, some conversational postulate is supposed to be entailed by the logical structure of a relatively long form, which includes a class of contexts and a set of conversational postulates. The aim of their approach is to constrain syntactic derivation pragmatically.

Due to the advancement of generative grammar in dealing with functional categories, researchers have more tools to incorporate pragmatics into syntactic analyses. Some pragmatically oriented functional categories were invented, and soon they reached into the "far left periphery." Among many others, Speas and Tenny (2003) discussed a typical proposal of this neoperformative school (see 2.9.1).

To prevent superfluity, we look into some specific proposals in the following sections, and I will only focus on the literature relevant to the elements in question and

will not include studies of topic and focus in this section, though they are undoubtedly pertinent to syntax–pragmatics interface (see Erteschik-Shir 2007 for an overview). Previous studies of focus will be reviewed when we come to high *sī* (是) in chapter 4.

Since the dissertation focuses on elements in TSM, a section will be devoted to the previous studies relevant to CP and syntax–pragmatics interface in TSM.

A review of the specific previous research about the elements under discussion will be postponed to the section where each element is investigated, respectively. That is to say, this chapter is devoted to an overall and general review of the previous studies apropos to the elements that are discourse-oriented.

2.2 Relevance theory (Sperber and Wilson 1995)

Relevance theory is a cognitive theory where pragmatic aspects of natural language interpretation are explained by principles of cognition. It uses the work of Grice (1967, 1989) as its historic antecedent. While Sperber and Wilson agree with Grice that communication involves inference, they do not adopt the co-operative principle and maxims for three reasons. First, it is not clear which status they have in linguistic or cognitive theory: Are they learnt or innate, universal or culture specific, or are they part of our linguistic or our social knowledge? While the maxims of quality, for example, have an almost moral flavor, the maxims of manner sound more stylistic. Second, the maxims are comparatively vague. Thus, it is not clear how, for example, the maxims of manner can be made more precise. Furthermore, there seems to be a certain amount of overlap—the maxim of relation, to "be relevant," for example, probably involves some consideration of the quality in relation to the quantity of the utterance—but these aspects are expressed by different maxims. Last and most important, Sperber and Wilson argue that inference plays a role not only in finding out what has been implied but in establishing what has been said in the first place; that is, inference is required, even for the establishment of linguistic meaning, in addition to the establishment of inferences drawn from it. The role of non-demonstrative inferential reasoning in the establishment of what has been said, as opposed to what has been implied, includes cases of ambiguity resolution, reference assignment—where notably pronominal elements underdetermine their encoded, truth-theoretic content—and the enrichment of encoded meaning.

The different view of pragmatics proposed by Sperber and Wilson suggests that inferential activities are all pervasive not only in communication but in the way we interact with our environment in general.

Sperber and Wilson point out that humans are information-processing animals. Input modules constantly extract information from the environment, largely automatically. This processing of incoming information results in a situation where there is more sensory information at any given moment than can be processed by the central reasoning processes where incoming information is projected. One of the central challenges for the human cognitive architecture is to make relatively fast and relatively reliable choices as to which incoming information is worth noting to distribute cognitive resources to improve our information state as efficiently as possible. In other words, we process maximally relevant information, and our reasoning is goal-directed (Sperber and Wilson 1995:49).

With this observation in mind, Sperber and Wilson propose the Cognitive Principle of Relevance (1995:260).

(2) Cognitive Principle of Relevance

Human cognition tends to be geared toward the maximization of relevance.

The relevance of a particular piece of information, where information can be characterized as a set of contextual assumptions, can be measured against the information state of the processor without these assumptions; that is, before they are processed. If nothing changes, the gain in information is zero, and processing the information is not relevant. On the other hand, if the new information changes the initial information state drastically, the information is very relevant. Sperber and Wilson propose that maximization of contextual effects is counterbalanced by processing cost. Mental activity involves "cost": thinking, information retrieval from long-term memory, and deriving conclusions are activities that need cognitive resources. These resources have to be allocated to derive maximally relevant information (in the maximal effect sense) with justified cognitive effort.

This is expressed in the definition of relevance:

(3) Relevance (Sperber and Wilson 1995: 25)

Extent Condition 1: An assumption is relevant in a context to the extent that its contextual effects in this context are large.

Extent Condition 2: An assumption is relevant in a context to the extent that the effort required to process it in this context is small.

The same principle can serve to explain the inferential–cognitive processes in communication with an additional principle.

(4) Communicative Principle of Relevance (Sperber and Wilson 1995: 260)

Every act of ostensive communication communicates the presumption of its own optimal relevance.

(5) Presumption of Optimal Relevance (Sperber and Wilson 1995: 270)

a) The ostensive stimulus is relevant enough for it to be worth the addressee's effort to process it.

b) The ostensive stimulus is the most relevant one compatible with the communicator's abilities and preferences.

In the relevance theory, the pragmatic aspects of utterance interpretation are inferential and involve the central reasoning system. However, other aspects of utterance interpretation are handled in the specialized linguistic module. These are automatic, algorithmic processes that crucially do not involve general reasoning, but the decoding of an arbitrarily defined code. The specialized linguistic module then provides input for the general cognitive system.

There are three aspects of utterance interpretation that require general reasoning, but that need to be resolved before a proposition can be established (where a proposition is a structure that can be evaluated for its truth value against a semantic model): disambiguation, reference assignment, and enrichment.

The output of the linguistic module is a semantic representation, but "semantic representations are incomplete logical forms, i.e. at best fragmentary representations of thoughts" (1995: 193). The first task of the central reasoning system is thus to derive a propositional form to which (model-theoretic) content, and only after that, any implied meaning, can be assigned. On the other hand, the output of the linguistic system is not a proposition, but an underspecified logical form (LF) in need of disambiguation, reference assignment, and enrichment.

Based on the conception of utterance interpretation, the Reverence Theory suggests that there is no full semantic representation for linguistic expressions without the contribution of pragmatic inferencing.

2.3 Informatics (Vallduví 1992)

Vallduví's theory of informatics provides a theoretical mechanism for linking syntactic structures with the field of INFORMATION PACKAGING (cf. Chafe 1976; Prince 1986). The role of Information Packaging is to optimize the entry of information into the hearer's knowledge store. By "packaging" a sentence in a particular way, a speaker gives instructions about what part of the sentence constitutes new information and how that information is to be inserted into the hearer's knowledge store (Vallduví 1992:15).

These instructions are created by combinations of the following primitives:

(6) S = {focus, ground} (Vallduví 1992:46 (44))

Ground = {link, tail}

First, the FOCUS is the only informative part of the sentence—it is new information for the hearer's knowledge store—as opposed to the GROUND, which is salient knowledge that the speaker assumes to be part of the hearer's beliefs. The ground is comprised of the LINK and TAIL. The link corresponds to a large extent to what has been called the *topic*. Vallduví adapts Heim's (1983) notion of File Change Semantics (originally developed for discourse referents) to account for the hearer's knowledge store. The knowledge store is a collection of FILE CARDS, each of which acts as an address, and this knowledge store is dynamically modified by creating new file cards and entering information onto those cards. A link, therefore, is an address pointer: It instructs the hearer to go to the same address in his/her knowledge store, as specified by the link, and to enter the new information in the sentence onto that card. Finally, the tail corresponds to knowledge that the speaker assumes is part of the hearer's knowledge store; it is already on a file card. However, it is important to clarify that hearer-old knowledge is not necessarily discourse old; the hearer could have acquired this knowledge from some other previous conversation or experience. Thus, the tail corresponds to an instruction to substitute the new information (i.e., the focus) for a particular "gap" in the knowledge on that card (Vallduví 1992:46-9, 66-7).[2]

The following example illustrates one possible combination of these primitives:

(7) a. [$_{L}$ The boss] [$_{F}$ HATES] [$_{T}$ broccoli]. (Vallduví 1992:56-7, 64-7)

[2] However, Kaiser (1999: 117-124) argues empirically that tails may contain hearer-old information or Bridgeable hearer-new information, but not non-Bridgeable hearer-new information (refer to Clark 1977 for the notion of Bridging).

b. The speaker believes that the hearer already knows that 'The boss _____ broccoli.' (i.e., _____ *broccoli* is already in the hearer's knowledge store at the address *the boss*).

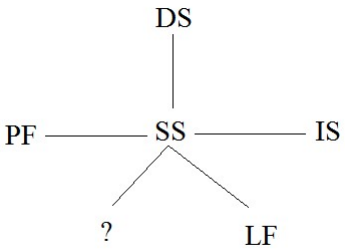
c. Λx_1, x_1 = the boss [λx_2 [Φ [x_1 **hates** x_2]]] (broccoli)

d. "I instruct you to go to the address *the boss* and retrieve the information of the sentence by substituting *hates* for the blank in *the boss* ____ *broccoli*, which is already under *the boss.*"

For example, suppose the speaker believes that the hearer already knows there is some relationship between *the boss* and *broccoli*, but does not know the exact nature of this relationship, as in (xb). In other words, the hearer already has a card with the address *the boss* (which is the link) in the hearer's knowledge store, and at that address is the entry ____ *broccoli*, which is the tail. Consequently, the speaker packages the information by dividing the sentences into a link, focus, and tail, as in (7), thereby highlighting *hates* as the new information to be substituted into this gap. This particular packaging, therefore, instructs the hearer to insert the information into the knowledge store, as in (9) and (10).

To link this theory of information packaging with the corresponding syntactic structures, Vallduví proposes a new interface level called INFORMATION STRUCTURE (IS):

(8) (Vallduví 1992:137 (258))



IS is the level at which information packaging is encoded. Specifically, by the time a derivation reaches the level of IS, whatever is to be interpreted as a link must be adjoined in a position to the left of IP, whatever is a tail must be adjoined to the right of IP, and whatever remains immediately dominated by IP will be interpreted as the focus:

(9) [LINK [[IP FOCUS] TAIL]] (by the level of IS) (Vallduví 1992:109 (191))

The positioning of an information-packaging primitive can be satisfied either overtly at the S-Structure or covertly at IS. For example, in a language like Catalan, the tail is marked overtly, since at the S-Structure it is already adjoined to the right of IP due to Clitic Right Dislocation:

(10) a. [$_{L}$ L'amo] [$_{F}$ l'ODIA], [$_{T}$ el bròquil]. (Vallduví 1992:110 (193b))
the-boss it-hates the broccoli
"The boss HATES broccoli."
b. SS: L'amo$_i$ [$_{IP}$ l'ODIA t_i t_j], el bròquil$_j$.
c. IS: L'amo$_i$ [$_{IP}$ l'ODIA t_i t_j], el bròquil$_j$.

In a language like English, on the other hand, the focus and tail are distinguished prosodically by stressing the focus, and the tail waits until IS appears to move covertly to its appropriate position adjoined to the right of IP:

(11) a. [$_{L}$ The boss] [$_{F}$ HATES] [$_{T}$ broccoli]. (Vallduví 1992:110 (198a))
b. SS: [$_{IP}$ The boss HATES broccoli].
c. IS: The boss$_i$ [$_{IP}$ t_i HATES t_j] broccoli$_j$.

Vallduví distinguishes IS from LF, since these levels represent two different types of meaning. While IS represents a sentence's information packaging, LF is the level that represents a sentence's logico-semantics. This may be illustrated by the following examples:

(12) a. SS: [$_{IP}$ Paul didn't KILL the judge]. (Vallduví 1992:132 (246))
b. LF: ¬ [Paul killed the judge].
c. IS: [Paul$_1$ [$_{IP}$ t_1 didn't kill t_2] the judge$_2$].
(13) a. SS: [$_{IP}$ Paul [$_{F}$ didn't kill the JUDGE]].
b. LF: ¬ [Paul killed the judge].
c. IS: [Paul$_1$ [$_{IP}$ t_1 didn't kill the judge]].
(14) a. SS: [$_{IP}$ Paul KILLED the judge]. (Vallduví 1992:132 (247))
b. LF: [Paul killed the judge].
c. IS: [Paul$_1$ [$_{IP}$ t_1 killed t_2] the judge$_2$].

Among these examples, (12) and (13) have the same propositional content and, therefore, have the same LFs, but their ISs are different because the information packaging of these sentences is not the same. On the other hand, (12) and (14) have the

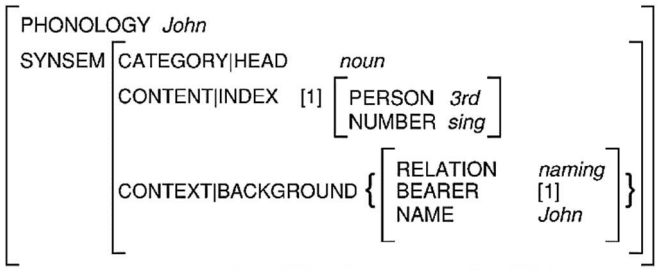
same information packaging and, as such, have the same structure at IS, but their LF representations differ since they convey different truth conditions.

2.4 An inclusive theory of grammar (Green 2000)

Based on an extended version of Head-Driven Phrase Structure Grammar (HPSG), Green argues that grammar is a collection of linguistic constraints on lexical and non-lexical linguistic signs (words and phrases), expressed via feature structures (with FEATURE-value pairs). The linguistic constraints are both grammatical (phonology, category, and content) and pragmatic (context).

Green's idea is illustrated in the example of the lexical sign *John*, as a set of constraints, below (from Fukushima 2006:425 Figure 6).

(15)

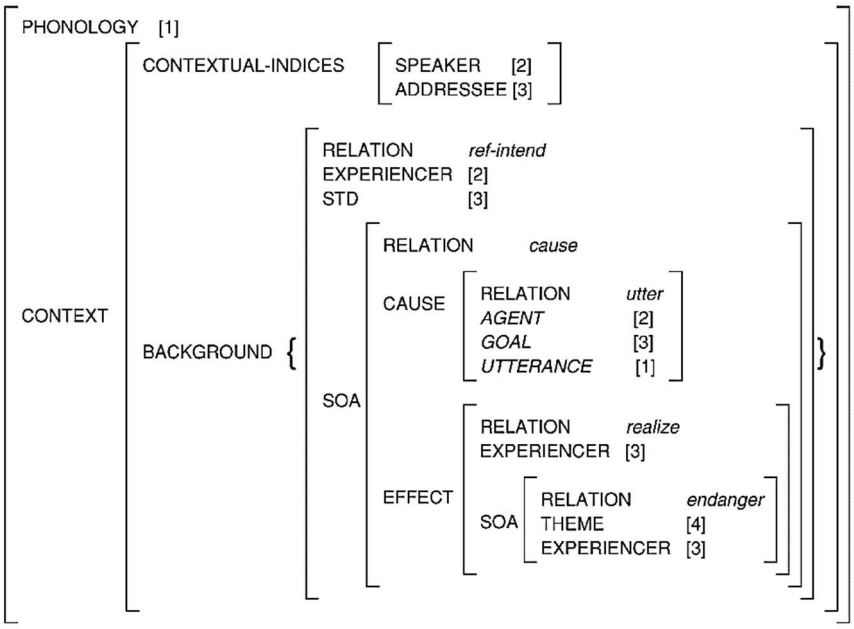


As shown in (15), the sign *John* satisfies the following constraints: It is a noun (syntax) used to refer to a third-person singular referent (semantics) who bears the name John (pragmatics). In such a feature structure, linguistic constraints are imposed on linguistic signs simultaneously and non-directionally. No privilege, for example, is given to syntactic information over pragmatic information.[3]

The same framework can also be employed to handle speech acts, such as a warning, which is diagramed in the following (cited from Fukushima 2006:425 Figure 7). According to Green, the illocutionary force (ILL) of a warning, such as a state of affairs (SOA), is roughly equivalent to a proposition, and ref-intend is shorthand for the sequence of predicates intend–recognize–intend–believe in the diagram.

[3] A similar idea can be found in Ndwiga 2014, which is termed "enrichment."

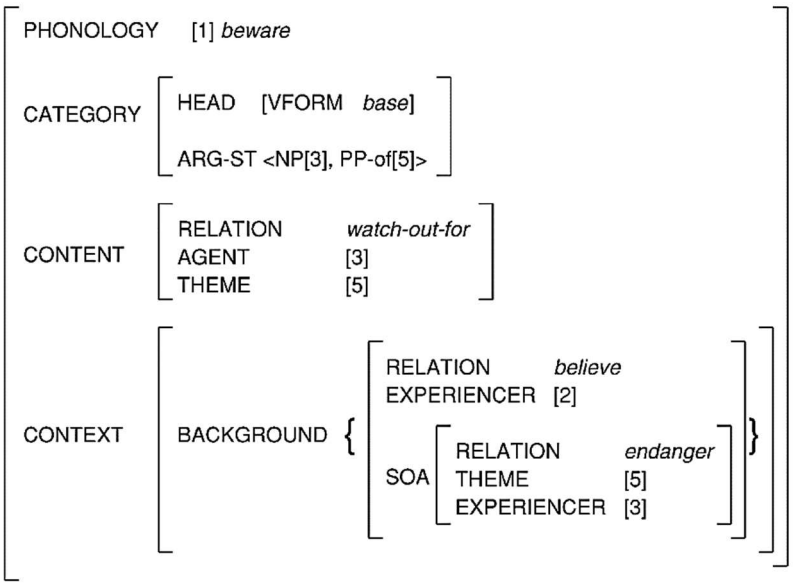
(16)



This diagram says that a linguistic sign with the phonological shape [1] can be uttered by a speaker [2] to an addressee [3]. This is done to bring about a state of affairs in which the speaker's uttering [1] to the addressee results in the addressee becoming aware of danger originating from some unspecified element [4]. Thus, the same technical apparatus both is used as a grammatical description and serves to elucidate illocutionary conditions.

Green suggests that the behavior of lexical items with restricted syntactic distribution can be accounted for in this scheme. For instance, consider the verb *beware* in "Beware of Godzilla!" and "I want you to beware of Godzilla," but not "I'm confident I'll beware of Godzilla." As part of its lexical definition, *beware* makes reference to the pragmatic condition on warning, as indicated in the diagram below. The lexical definition tells us that *beware* is a verb that is uninflected and takes two arguments, $NP_{[3]}$ and $PP_{[5]}$. The subject [3] watches out for the object [5], and the speaker [2] believes that the object endangers the subject.

(17) The lexical definition of *beware* (cited from Fukushima 2006:426 Figure 8)



The inclusive theory of grammar, therefore, simultaneously accommodates constructional (syntactic), causality (semantic), and illocutionary (pragmatic) aspects of sentences. This type of account is available due to the inclusiveness of the HPSG architecture in which grammatical information and pragmatic information can be brought together and synthesized under a single structure representation.[4]

2.5 Dynamic Syntax (DS; Kempson 2001)

DS is a formal model of natural language syntax that provides an explicit characterization of the process by which hearers access words in the order in which they appear in the utterance and use the information provided to build structured semantic representations in a step-by-step fashion. The process is strictly incrementally and done in a goal-driven fashion, guided by the overall requirement that hearers establish propositional structures to derive inferential effects from the words encountered. The system involves but a single level of representation, and the need for multiple levels is replaced by the concept of growth of partial representations; these representations themselves are part of a denotationally interpretable system.

The main concern of DS is to model the syntactic aspects of the process of utterance interpretation (instead of utterance production). In the broadest sense, utterance interpretation involves an incoming signal, prototypically a continuous

[4] Apart from Green's proposal, there are also other studies, such as those by Ginzburg and Sag (2000) and Ginzburg et al. (2003), in which a HPSG scheme can be found under the same neoperformative hypothesis.

undivided input stream of sound on the one end and a completely interpretable enriched mental representation on the other. The mapping involves the application of phonological, syntactic, semantic, and pragmatic knowledge as intermediate steps in that all of them contribute to processing some input.

The DS model is closely linked to relevance theory (Sperber and Wilson 1986, 1995). DS provides a model of syntactic knowledge based on the relevance-theoretic assumption that utterance interpretation is a goal-directed process. One can employ the DS model to use lexical information for the derivation of inferential effects in the structure-building processes.

In accordance with relevance-theoretic assumptions about the nature of pragmatic inference, DS structures do not represent direct mapping from a linguistic form to model-theoretic interpretation. However, in contrast to relevance theory, DS does not employ a notion of interface level, such as LF. Rather, the assumption is that pragmatic inferencing may apply to lexical items directly and at each step of the process of structure building. This view implies that syntax and pragmatics derive propositional forms in tandem, so that pragmatic inferences may determine the well-formedness of a DS tree.

(18) Utterance Interpretation

sound → phonology → lexicon → {syntax, pragmatics} → {interpretation, semantics}

The process of utterance interpretation starts from hearers receiving a physical signal, a continuous input stream of sound, which provides the input to phonology. Phonology can be characterized as a body of knowledge that enables hearers to divide the input stream into phonological domains that provide lexical access. Lexical information provides the input to the building of the propositional form. The propositional form is established by using information from the lexicon and the syntactically defined transition rules on the one hand and non-demonstrative inference on the other. Model-theoretic semantic interpretation is assigned to the propositional form, which is part of the interpretation of the utterance.

The syntactic aspect of utterance interpretation is modelled in DS as an incremental increase of information about the eventual propositional form. The syntactic vehicle for interpretation is tree a structure for which a (operational) semantics

is given in the form of a modal logic known as the logic of finite trees (LOFT). The growth of information in the process of utterance interpretation can be characterized as an increase in the information about the tree structure established at a given stage in the process. The model refers to trees and tree descriptions and characterizes the increase of information about a given tree, corresponding to the process of tree growth. Transitions from one partial tree structure to another, up to the establishment of the eventual tree representing the propositional form, are licensed by lexically encoded instructions and by syntactically defined, optional transition rules.

The dynamic unfolding of structure is modelled in DS as tree growth. The LOFT describes binary branching tree structures, reflecting the mode of a semantic combination in a function application. Nodes in the tree may be identified by a numerical index ranging more than 0 and 1.

Here is a sample derivation from Marten (2002: 34-40) for the sentence in the following (Marten 2002:34 (39)):

(19) Sally loves chocolate.

The derivation begins with the introduction of the root node by Axiom:

(20) ● {Tn(0),?Ty(t) ♦ }

In the descriptive unit (DU) above, Tn is the numerical index indicating a node. Nodes in the tree may be identified by a numerical index ranging more than 0 and 1 and their combinations. Ty marks the semantic type of a node. Here we have a question mark before it, which asks for information (the current task). In this case, its requirement to derive an expression of Ty(t) reflects the justified expectation of a hearer that the tree-building process will result in the proposition form. The pointer symbol ♦ indicates the current node.

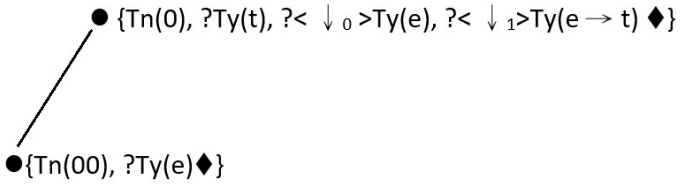
In the tree-growing process, there may be several rules available to apply, and their application is optional. At this stage, the Introduction rule is employed. Introduction licenses the introduction of two modal statements to the effect that at the daughter nodes, two subtasks are required, which together bring up a result satisfactory to the requirement. We thus obtain the result below.

(21) ● {Tn(0), ?Ty(t), ?< $\downarrow_0$ >Ty(e), ?< $\downarrow_1$>Ty(e → t) ♦}

The arrows are modality operators. The down arrow corresponds to the daughter relationship and the up one the mother relationship. They can be used with the numerical subscript to be easily distinguished between the left and right branches. Now the pointer comes down to indicate the current task is on the daughter node.

By Prediction, the argument daughter can be built. Prediction can bring in a new node where the requirement minus the modal operator holds.

(22)



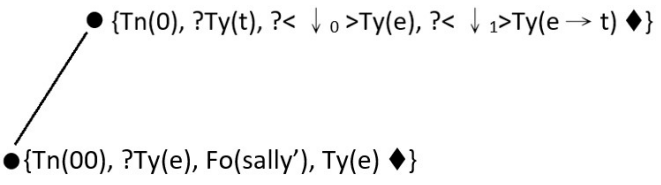
At this stage, the first word is scanned—namely *Sally*—with the assumed lexical entry:

(23) *Lexical Entry for* Sally

IF ?Ty(e)
THEN put(Fo(sally'),Ty(e))
ELSE abort

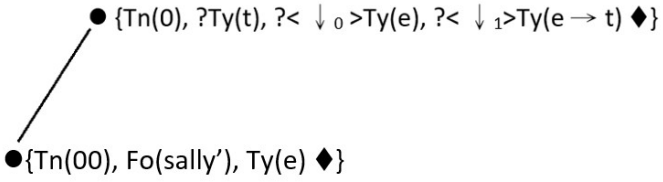
The current task state matches the condition in the IF clause, so the formula value Fo(sally') and the type value Ty(e) can be introduced.

(24)



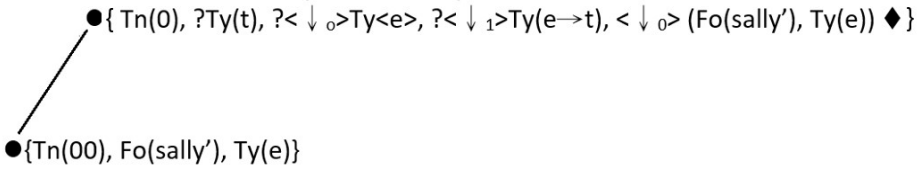
At this stage, Thinning can apply to Tn(00) to remove the requirement. Thinning is a rule that simplifies DUs. If a DU holds at a current node that includes both a fact and the requirement to fulfil this fact, the requirement can be omitted. The node is still the current node. After Thinning is applied, we have the following:

(25)



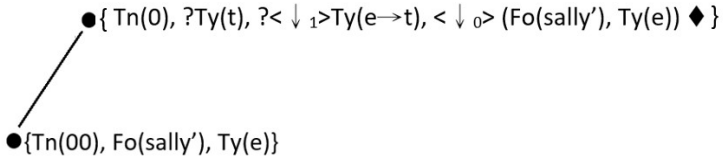
Among the transition rules, Completion states that if at a daughter node some information holds and if the daughter is the current node, then the mother node may be annotated with the corresponding modal statement and become the current node. By Completion, we then attain the result below:

(26)

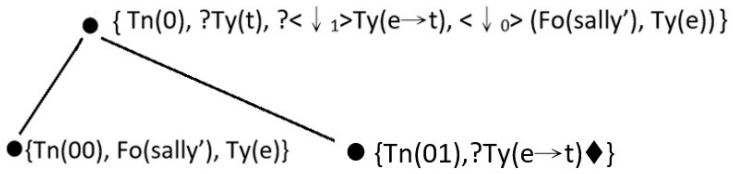


At this stage, two rules could apply at Tn(0). The first one is Thinning for one requirement holding at Tn(0), which has been fulfilled, and the second is Prediction, since there is still the modal requirement of the functor node. They differ in that only Prediction moves the pointer. That is why Prediction applies after Thinning. The following two diagrams indicate the result from Thinning application and from the later Prediction application, respectively.

(27)



(28)



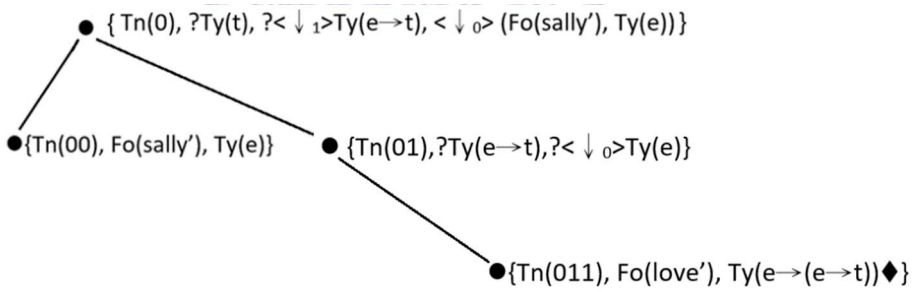
The scanning of the word *love* then occurs. The following information is accessed.

(29) *Lexical Entry for* love

IF ?Ty(e→t)
THEN put(?<↓$_0$>Ty(e))
make(<↓$_1$>), put(Fo(love'), Ty(e→(e→t)))
ELSE abort

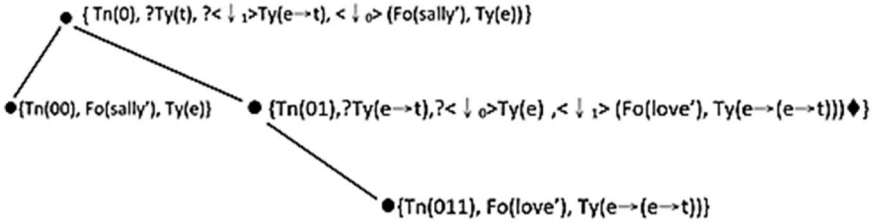
The condition on the Introduction of the lexical information from *love* is met, since the current node has a requirement ? Ty(e → t). The first "put" statement annotates Tn(01) with a modal requirement, after which the "make" statement results in the building of a new functor node, which is annotated with the information specified in the second "put" predicate:

(30)



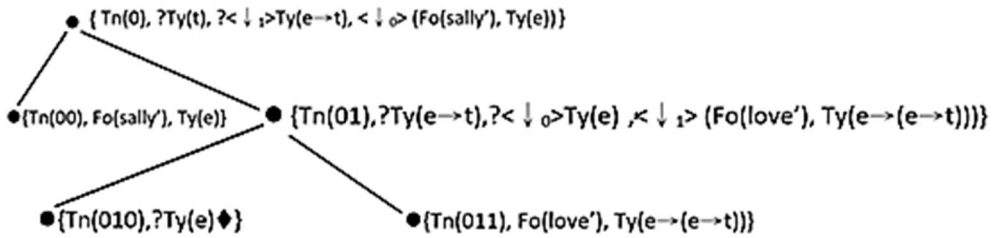
Completion applies to annotate Tn(01) with a modal statement, registering the fulfilled requirement at Tn (011):

(31)



Following this, Tn(010) is built with the Prediction application at Tn(01) due to a new modal statement therein.

(32)



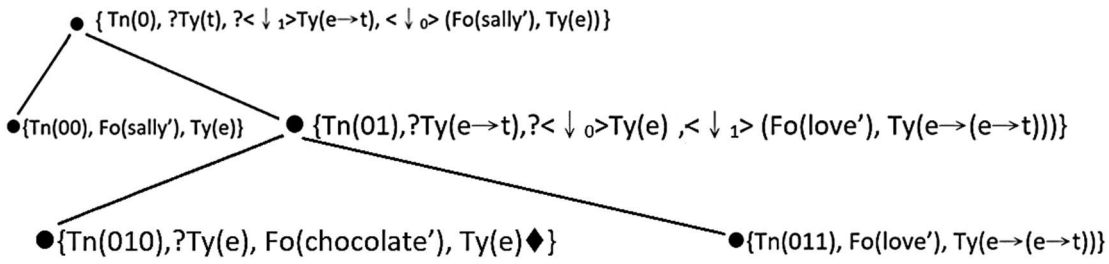
Again, we scan lexical input, and this time, we have *chocolate* with the lexical information introduced into the tree:

(33) *Lexical Entry for* chocolate

IF ?Ty(e)
THEN put(Fo(chocolate'),Ty(e))
ELSE abort

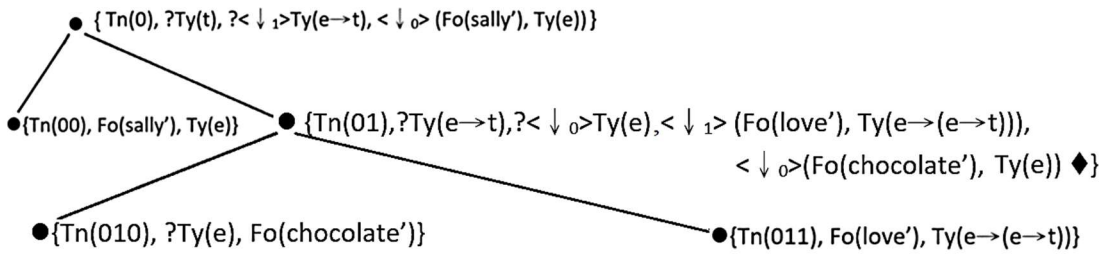
The current node requires a Ty(e) expression, and the IF statement meets the requirement. Therefore, we apply the "put" statement and obtain the following:

(34)



So far, all lexical information has been scanned, and the verb's lexical requirements are fulfilled. The remaining steps serve only to combine the accumulated information. First, Thinning applies to Tn (010); second, Completion applies to Tn (01).

(35)



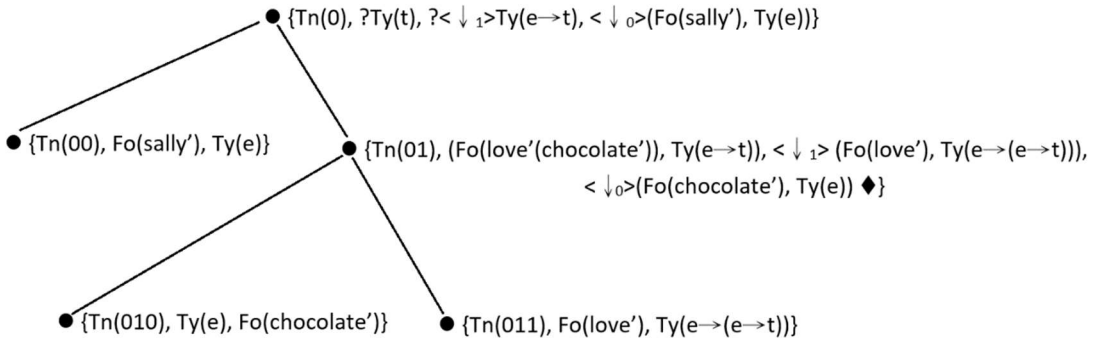
After this, Thinning applies to Tn (01) and the requirement ?<↓$_0$>Ty(e), which is fulfilled by the Ty(e) expression at the argument node and is removed. Elimination then applies to the values of the two daughter nodes at Tn(01). The transition rule Elimination changes the annotations holding at one node. The rule states, if two modal statements hold at a given node, at which state both the argument daughter and the functor daughter are annotated with a formula and a type value. The two type values can combine by modus ponens, then the resulting type and the corresponding expression derived by function application over the formula values hold at that node.

After the application of Elimination, we have the DU of Tn(01), as below:

(36) ● {Tn(01), ?Ty(e→t), (Fo(love'(chocolate')), Ty(e→t)), <↓$_1$> (Fo(love'), Ty(e→(e→t))), <↓$_0$>(Fo(chocolate'), Ty(e)) ♦}

By Thinning, the requirement ?Ty(e→t) is fulfilled by the derived fact Ty(e→t) and removed. Below is the diagram derived to this stage:

(37)

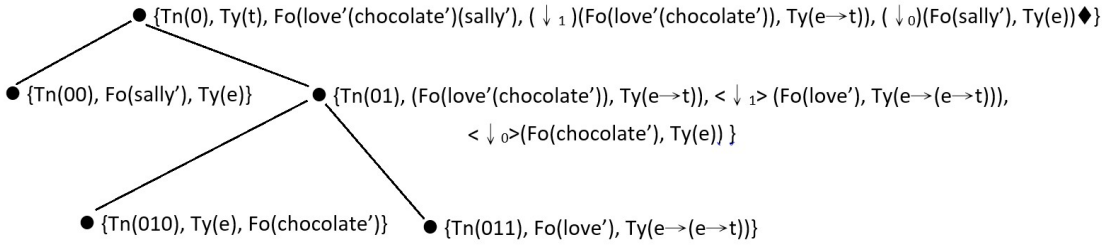


Next, Completion applied to Tn(0) and Tn(01) annotates Tn(0) with a modal statement. The DU resulted at Tn(0) is in the following:

(38) ● {Tn(0), ?Ty(t), ?<↓$_1$>Ty(e→t), <↓$_0$>(Fo(sally'), Ty(e)), <↓$_1$>(Fo(love'(chocolate')), Ty(e→t)) ♦}

By Thinning and Elimination, the derivation ends with the final tree below:

(39)

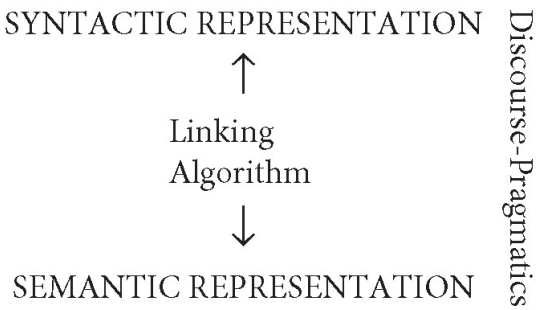


As pointed out by Kempson, the way for DS to progressively build up a representation is a basis for doing syntax and not vice versa. Syntax in DS does not include a level of representation over a string of words, and the trees of DS are not inhabited by words and have nothing to do with syntactic word order (2012: 542). Therefore, for those who are interested in the syntactic derivation and the derived structure, DS cannot serve their purpose.

2.6 Role and Reference Grammar (RRG; Van Valin & LaPolla 1997; Van Valin 2005)

RRG is a linking theory with direct mapping between semantic and syntactic representations unmediated by any kind of abstract syntactic representation, and discourse pragmatics plays a role in this linking as well. The basic organization of RRG, as a model of the syntax–semantics–pragmatics interface is given below (from Van Valin 2008: xv Fig. 1).

(40)



As a parallel architecture theory (Jackendoff 2002), RRG assigns each of these aspects of the linguistic system its own representation and investigates the interaction among them both within languages and across languages. Many phenomena that are treated as purely syntactic in many generative approaches are treated here in semantic terms (e.g., reflexivization) or in terms of the interaction of syntax and pragmatics (e.g., extraction constraint like "subjacency").

RRG is characterized by the representation of different components of grammatical structure via a series of projections, namely the constituent projection, the operator projection, and the focus structure projection, which are supplemented by a semantic representation. These projections can be related to one another and can be associated with the semantic representation using linking rules, which may be universal or language-specific in character.

RRG's view of non-relational syntactic structure [5] separates a constituent projection based on the principles of "dependency, constituency and topology" from an operator projection and based on the principles of modification and scope.

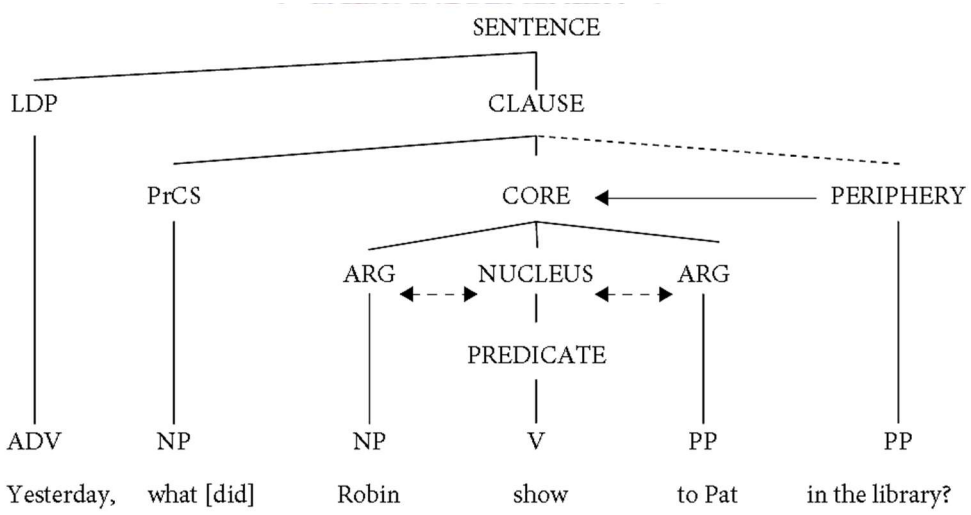
The first aspect of the constituent projection is structured through two semantic contrasts on the syntagmatic axis based on the principle of dependency. The first one is between predicating elements (defining the *nucleus*, NUC) and dependent non-predicating elements, and the second one is in the realm of non-predicating elements between arguments depending on the nucleus (realized as *syntactic arguments*, ARG, or as *syntactic argument-adjuncts*, AAJ) and non-arguments (realized as *adjuncts*, ADJ). The nucleus and its dependent syntactic arguments or non-arguments (*nuclear*

[5] Relational structure deals with the relationships that exist between one syntactic element and another, be they syntactic, semantic, or pragmatic in nature, whereas a non-relational structure expresses the hierarchical organization of phrases, clauses, and sentences; however, it may be conceptualized (Van Valin, Jr and Lapolla 1997: 17).

periphery) constitute the *core*; the core and its dependent non-arguments (*core periphery*) constitute the clause; and the clause and its dependent non-arguments (*clausal periphery*) constitute the sentence.

The second aspect of the constituent projection is structured through two pragmatic contrasts on the syntagmatic axis based on the principle of linearity/relative position. There can be two extra-core slots (ECS), one to the left (*pre-core slot*, PrCS) and another to the right (*post-core slot*, PoCS) of the core; the core together with the core periphery and the ECS constitute the clause. On the next level, there can be two kinds of *detached positions* (DP), one to the left (*left detached position*, LDP) and one to the right (*right detached positions*, RDP) of the clause; the clause with the clausal periphery and the detached positions constitute the sentence. Because crossing branches are allowed, there is no obstacle to postulating an *intraclausal detached position* (IDP), which the theory employs to cope with parenthetical syntactic units. Below is an illustration from von Colbe (2008: 248 Fig. 1).

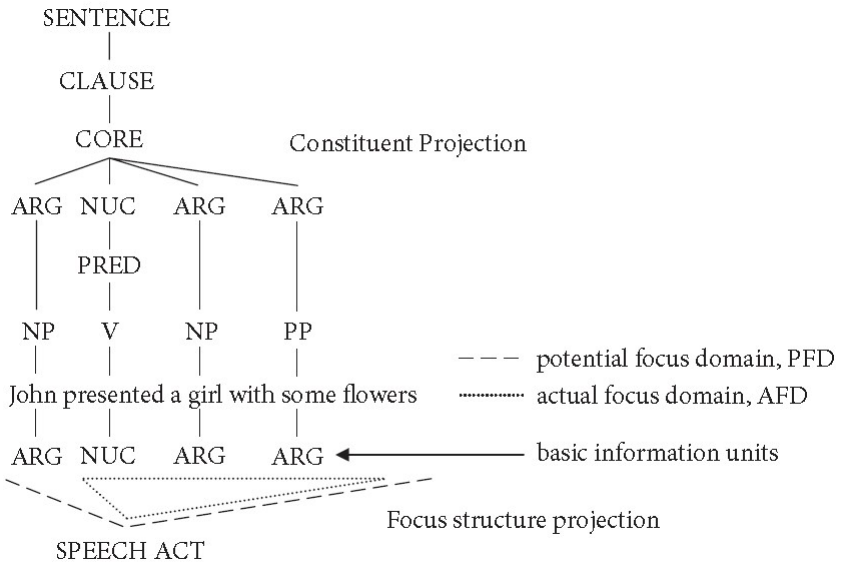
(41)



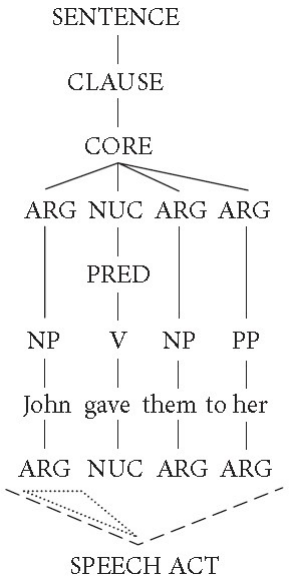
When it comes to a syntax–pragmatics interface, RRG employs additional structure projection to deal with it. As mentioned above, within the focus structure projection, the focus domain is represented by means of demarcating a potential focus domain (PFD) and an additional demarcation of where the actual focus domain (AFD) occurs with respect to PFD. The AFD corresponds to the "focus domain," which results from the pragmatic structuring. This may be illustrated by the predicate focus and

narrow focus contexts in examples below, taken from Van Valin and LaPolla 1997: 215-216.

(42) John presented a girl with some flowers.



(43) John gave them to her.



By doing so, a correspondence between the constituent projection and the focus structure projection reflecting syntactic expression of information structure is revealed. In the same vein, O'Connor (2008) even proposes to incorporate the prosodic expression of information structure into the RRG view of grammar.

To my knowledge, the model of RRG has not been extended to include the roles of speaker and addressee. Moreover, the RRG hierarchical structure is relatively flat and symmetrical in a way that makes its compatibility with the anti-symmetric sentence structure dubious. For a syntactic study in depth, RRG does not seem to fit well.

2.7 Chierchia 2004 and Reinhart 2006

2.7.1 Chierchia 2004

Traditionally, the computational system of grammar and the conceptual and/or pragmatic system are considered separate units and work in a modular way, such that each unit is blind to the inner workings of the other. Chierchia (2004) argues that in certain important respects, this view is wrong.

He takes the (neo)Gricean view as a starting point and tries to establish a factual generalization relating scalar implicatures (SI) to polarity phenomena. The resulting outcome is that the contexts in which *any* is licensed (in both its NPI and free-choice variant) appear to be to a remarkable degree the same as those in which SI are recalibrated (i.e., direct implicatures are removed and indirect ones come about). Chierchia then suggests the mechanisms at the basis of both phenomena must be somehow sensitive to similar factors. He carefully examines how SIs are computed and NPIs licensed and points out the following.

First, SIs are not computed at the level of root sentences for the interaction of SI computation with several connectives and quantifiers, which turns out to be problematic. Chierchia therefore suggests that SIs are introduced locally and projected upward.

Second, taking NPIs as a marked form of indefinites, their specificity is deemed as the presence of some kind of domain expansion (or willingness to consider alternative domains). Chierchia's idea is that the use of NPIs must be more informative than the use of basic forms. In other words, generalizing over domain expansions is admissible only when it yields something stronger than that which one gets without such a generalization. He explores two plausible answers to the question about the way the generalization over domain expansions comes about and is enforced. He also points out that what SIs and NPIs have in common is a (local) comparison of degree of informativeness with a set of competitors. They differ in the dimensions of the

respective comparisons as well. According to Chierchia, such a comparison for SIs is built into a recursive bottom-up interpretive process, where the relevant condition is checked at each step all the way up. Moreover, it is morphologically (i.e., lexically) driven. Consequently, some kind of locality effect is expected.

Third, Chierchia looks into another difference between SIs and NPIs, namely the fact that where the former display intervention effects, the latter do not. His conjecture is that NPIs compete with the scalar meaning of indefinites and are licensed only if they turn out to be stronger than the scalar value of the corresponding sentences with plain indefinites.

Chierchia's proposal has consequences for the overall architecture of grammar at the interfaces. He argues that pragmatic computations and grammar-driven ones are "interspersed." Implicatures are not computed after truth conditions or (root) sentences have been figured out; instead, according to Chierchia, they are computed phrase by phrase with truth conditions.

2.7.2 Reinhart 2006

Slightly differing from Chierchia's proposal that syntax and pragmatics go hand-in-hand down the way of derivation, Reinhart suggests that reference-set computations, in which interpretation is referred, is the last resort in some specific situations.

In her monograph, Reinhart argues that the derivation of grammatical utterances may rely on comparisons of alternative derivations. In her proposal, the comparisons are done on "reference sets" of <derivation, interpretation> pairs (<d, i>-pairs). Note that only derivations with an identical numeration can be part of the reference set. Reference sets are checked against the context interface and are subject to economy principles that aim to minimize the interpretive options available. If an operation is illicit (inefficient) but necessary in deriving a desired interpretation, then the grammar may license that derivation. However, a given <d, i> pair is blocked if the same interface effect could be obtained more economically; that is, when there is a better <d, i> competitor in the reference set.

Due to the high processing cost incurred, Reinhart suggests that reference-set computations can only be used in specific situations where the creation of a set is the

only mechanism available for an output to be made legible by the interfaces. Moreover, creating and comparing a reference set is limited by human working memory, and, therefore, the number of candidates available in each reference set is restricted in contrast to the unrestricted source of candidacy in Optimality Theory.

2.8 The limit of the theories

Despite the abundance of literature about syntax–pragmatics, the theories introduced so far seem to be incapable of explaining the elements targeted in this dissertation that exhibit a rigid word order between each other.

To provide adequate syntactic analysis for each item in question, I will adopt a Cartographic Approach instead of all the mentioned proposals. The framework to be adopted is introduced in the following section.

2.9 Cartographic Approach

Departing from the works inspired by Rizzi (1997 and the following) and Cinque (1999 and the following), researchers have expanded the application of the cartographic approach from analyzing information structure, like foci and topics, into the pragmatic territory to include notions, such as roles in the discourse, speaker attitude, and the interaction between the speaker and the addressee. The centerpiece of this line of research is to explain the pragmatic factors and influence bearing on syntactic structure by accounting for the pragmatic effects with additional syntactic functional projections to incorporate pragmatic factors into the syntactic operation.

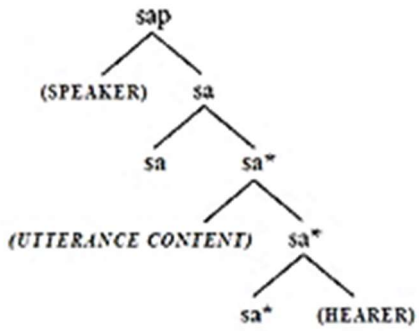
2.9.1 Speas and Tenny 2003

As the seminal proposal of the pragmatic realization in syntax, Speas and Tenny (2003) postulate a speech act phrase (SAP) selects the CP. In their account, the SAP is the place where the assignment of pragmatic roles (Speaker, Hearer, and Utterance Content) is related to the configuration in which they appear. This proposal follows Rizzi (1997), Ambar (1999, 2002), and Cinque (1999) in claiming that "syntactic structures include a projection whose head encodes illocutionary force" and suggest that "this head is overt in languages that have sentence particles, clitics or morphemes indicating whether the sentence is a statement, question, etc." (Speas and Tenny 2003:317).

The purpose of Speas and Tenny's (2003) study is to explore to what extent we may encode information relevant to the syntax–pragmatics interface. They suggest syntactically representing sentience (animacy, subjectivity, or experiencer-hood) and argue that basic syntactic principles constrain projections of pragmatic force as well as pragmatic roles. In the parallelism of the syntactic principles imposing constraints on possible lexical items, Speas and Tenny suggest that basic structure principles also operate on primitives of a Sentience Domain and restrict the interface. Their proposal is based on the following observations. First, grammatically relevant pragmatic roles (P-roles) are limited. Many logically possible speech acts are never grammaticalized. Second, no language shows grammaticism in more than three roles: speaker, hearer, and one logophoric role. Third, P-roles seem to fall into a hierarchy. Last, we can isolate about five P-roles (speaker, hearer, source, self, pivot), but we can't seem to define the roles precisely.

Taking Cinque's (1999) Speech Act Phrase, encoding illocutionary force, and indicating the sentence is a statement, question, and so on as a point of departure, Speas and Tenny focus on those forms corresponding to direct speech acts and note that the type of speech acts grammaticalized in natural languages are surprisingly constrained, no more than assertives, directives (interrogatives and imperatives), commissives, declarations, and expressions. They propose that the projection of the speech acts is constrained by the basic principles suggested by Hale and Keyser (1993) and Canac-Marquis (2002); based on these principles, Speas and Tenny claim that the speaker is the agent of the speech act, the utterance content is its theme, and the hearer is its goal. In this vein, they suggest (44) the structure of the speech act projection for declaratives.

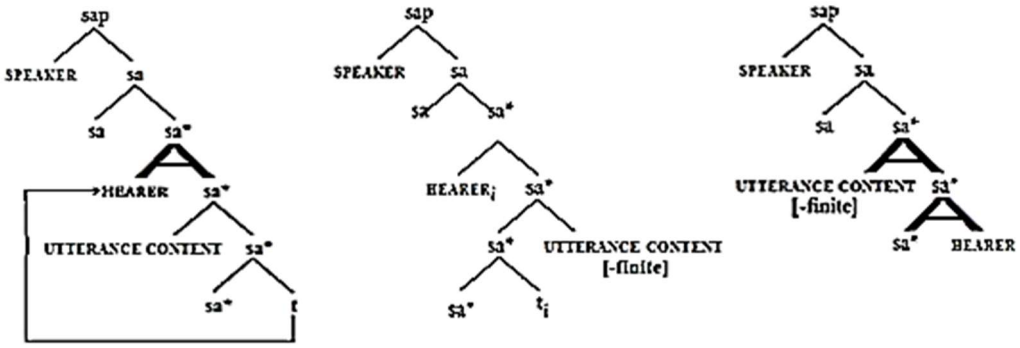
(44) declarative



As for the other speech acts, they adopt the Case Absorption in Dative Shift from Larson 1988. According to Larson, the indirect object (goal) can be promoted and

the direct object (theme) can become oblique. By applying a parallel process to the speech act shell, we then get the structure for interrogatives.

(45) a. interrogative b. imperative c. subjunctive

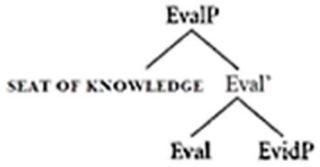


Interrogative sentences involve the absorption of some feature of the lower head and the attraction of the hearer to the specifier of the lower head for feature checking. The hearer is also the closest c-commander of the utterance content. The hearer is in a position to control the highest argument in the point of view domain (sentient argument; the hearer possessing the knowledge relevant to evaluating the utterance content). On the other hand, corresponding to the subcategorization features of a verb, according to Speas and Tenny, the speech act head may select a finite or nonfinite complement (utterance content). When the complement is finite, we have a declarative, whereas if the complement is nonfinite, we will have either an imperative (the hearer c-commands the utterance content) or a subjunctive (the utterance content c-commands the hearer).

With data from Arabic, Mupun, and Athapaskan, Speas and Tenny demonstrate that the interaction between thematic and pragmatic roles are restricted by syntactic locality principles and argue that the roles of the speaker and hearer are not only represented in discourse representation but in syntax.

In addition to the speaker and hearer, Speas and Tenny note some grammatical phenomena that depend on the sentient individual whose point of view is reflected in the sentence. Evincing that basic syntactic properties also restrict the inventory of this pragmatic role (P-role), they suggest there is only one P-role in addition to the speaker and hearer. To reflect the point of view from the sentient individual in the sentence, Speas and Tenny suggest the projection, the Evaluation Phrase (EvalP), which is of evaluation broader than the notion relevant to evaluative adverbs. According to them, this EvalP has an argument structure, just like the Speech Act projection.

(46)

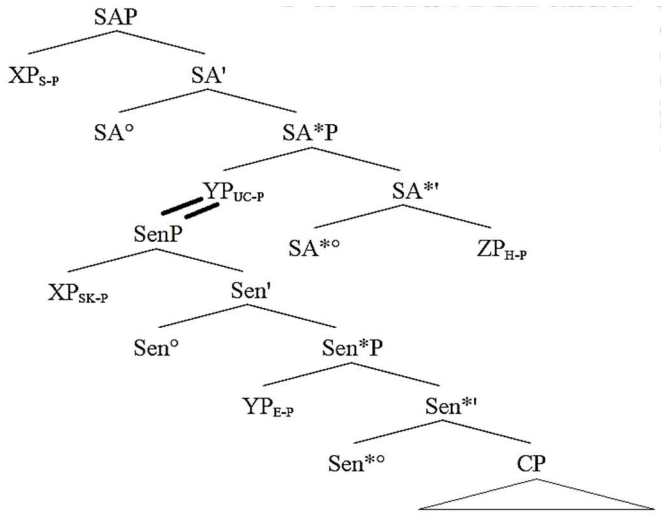


At the specifier, the sentient argument holds the seat of knowledge, and the proposition is the second argument, labeled Evidential Phrase (EvidP), which is the Sentience Domain. Speas and Tenny suggest that EvidP can be considered a lower projection of a shell and, with the structure above, can be seen as Sentience Phrase.

Under this analysis, the seat of knowledge can be co-indexed with either the speaker or hearer. In the former's case, we will have an unmarked statement or a subjunctive; in the latter's case, we will have a question or an imperative. Otherwise, the sentient individual can be someone other than the discourse participants.

The overall picture of Speas and Tenny's proposal is illustrated in the following.

(47)



2.9.2 Hill 2007; Haegeman and Hill 2013; Haegeman 2014

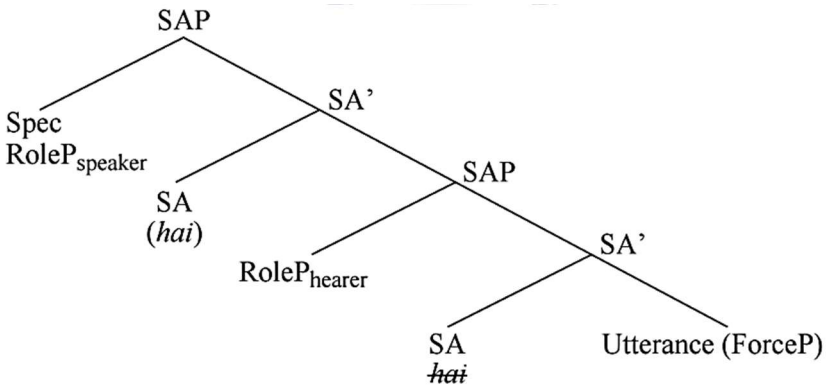
Due to the schemes they reached being similar, the three studies of Hill and Haegeman are reviewed together in this subsection.

Hill (2007) argues that vocatives are visible to syntactic computation. The investigation relates the behavior of vocatives (forms of direct address) to the behavior of exclamative expressions (forms of indirect address) and to the pragmatic markers for

speech acts. The results support current proposals for a predicative structure at the syntax–pragmatics interface and point to further refinements of the theoretical framework. In particular, the parallel treatment of *v*P shells and Speech ActP shells is extended to the relationship between Case and syntactic positions, yielding a distinction between two Cases in the pragmatic field: an Exclamative Case for DPs of indirect address and a Vocative Case for DPs of direct address. In this framework, the syntactic and the pragmatic fields undergo similar operations for licensing DPs in argument positions.

The Speech Act shell proposed by Hill (2007) is based on the distribution of the verb-based particle *hai* ('come') and vocatives in Romanian, as well as vocative constructions in Bulgarian and Umbundu. Hill's $\text{RoleP}_{\text{hearer}}$ hosts the vocative. Hill explicitly says that Speech Act heads have [V]-features. This is very much in line with the fact that the West Flemish discourse markers are studied in Haegeman 2014. For Hill, the speech act layer corresponds to a projection with V-features with three arguments—speaker, hearer, and utterance—compared to Speas and Tenny's (2003) framework and the projection of a transitive verb. However, Hill does not consider the possibility of there being an unaccusative counterpart, which is suggested by Haegeman (2014) with evidence from the West Flemish data.

(48)



Unlike Speas and Tenny (2003), in their analysis of the discourse particles in Romanian and West Flemish, Haegeman and Hill (2013) postulate that the high left peripheral layers are directly related to the speech events, including the establishment of a rapport between speaker and hearer in terms of either "attention-seeking" or of "bonding."

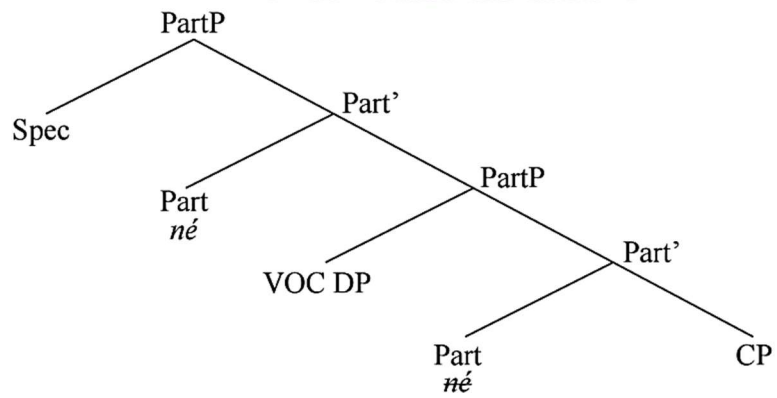
Based on Speas and Tenny's proposal, they assume that ForceP in the sense of Rizzi 1997 is selected by an articulated Speech Act projection headed by the Speech Act (SA) head, with a layered articulation, much as is the case with transitive verbs, which project a VP shell and a *v*P shell. The lower SA head is directly associated with the "hearer." SA takes two arguments: its "direct object"—the ForceP complement—and its "indirect object"—the vocative phrase, which is the specifier of SA.

(49) [$_{saP}$ [$_{sa}$] [$_{SAP}$ VOCATIVE [$_{SA}$] [$_{ForceP}$ Utterance]]]

Departing from her observation of the West Flemish discourse markers, Haegeman (2014) proposes a syntactic analysis of the discourse marker *né* and *wè*. Considering the distribution of these markers with vocatives and dislocated DPs, Haegeman suggests an articulated speech act layer, which looks similar to Hill's (2007) speech act shell. According to Haegeman, there is a syntactic relation between particles used as discourse markers and vocatives, and the relevant computation at the interface is of the same nature as of that in Narrow Syntax.

To account for the data in West Flemish, Haegeman proposes the articulated structure below.

(50)



The CP in the diagram is an abbreviation for ForceP and the projections containing disclocated material. To encode the relationship between the projection of the discourse marker (PartP) and that of the vocative, the diagram above is a layered functional structure with two PartP shells. The discourse marker is merged in the lower Part head and moves to the higher head. In terms of the architecture of the projections, Haegeman's proposal is very similar to Hill's.

Despite their similarity, Haegeman's proposal departs from Hill's (2007) in at least two respects.

First, unlike Hill's postulation of only one SAP, Haegeman adopts the hypothesis that there are two speech layer projections. She then tentatively characterizes the higher SAP as "dynamic" and "directional," relating the utterance to an addressee as the one for whom the utterance is intended. On the other hand, the lower speech act shell is used to consolidate and possibly qualify the already established speaker–addressee relationship in relation to the content of the utterance; in other words, this signals that the speaker has the authority to make the statement or to give the order. In this vein, the vocative does not serve to identify the addressee within the set of potential addressees; rather, the vocative is an "address vocative" designed to maintain or emphasize the contact between the speaker and addressee. Haegeman tentatively suggests that the lower SAP/PartP is "stative" and more "attitudinal." That is to say, the higher projection is more directly related to the performative aspect of the speech act, initiating the hearer–speaker relationship; the lower projection modulates the (already established) relationship between the speaker and hearer, and thus corresponds to the Attitude projection identified by some researchers, such as Paul (2014).

Second, Hill represents the speaker role in the specifier of the topmost SAP. Since Haegeman assumes that CP moves into the specifier of the lower PartP2 (cf. the lower SAP) and that PartP2 itself may move to SpecPart1, their proposals are not totally compatible.

2.9.3 Giorgi 2008; 2009b; 2010; 2012

In her investigation into the relationship between syntax and context, Giorgi (2009b; 2012) proposes a syntactic layer at CP, C-speaker, which represents the temporal and spatial coordinates of the speaker coordinates in a specialized projection C-speaker as "the highest, leftmost, position in the Complementizer-layer" (Giorgi 2009b:134)

Based on the temporal interpretation of clauses, especially the double access reading in English and Italian found in an embedded clause when the sequence of tenses occurs, Giorgi points out the necessity of hypothesizing the presence of the speaker's temporal location in the syntax. In addition, the C-speaker projection, according to Giorgi, also accommodates certain first-person verbal forms, such as *credo* 'I think' in

Italian, which is shown to be better analyzed as an epistemic head. In this kind of cases, the C-speaker projection becomes overtly realized.

2.9.4 Coniglio and Zegrean 2012

Based on the observation of German modal particles (MPs), including *denn*, *doch*, *ja*, *schon*, *wohl*, and so on, Conigilio and Zegrean point out a crucial syntactic property that each German MP (and discourse particles in other languages) is only compatible with specific clause types. Additionally, they also demonstrate that the licensing of discourse particles pivots on illocutionary force, such as the speaker's intention in producing an utterance, in the sense of Austin 1962 and Searle 1975a. According to Searle (1975a), we can distinguish five main categories of speech acts: assertives, directives, commissives, expressives, and declarations.

The illocutionary force is assertive when the speaker wants to assert the truth of the proposition, it is directive in orders and utterances requesting an action or a piece of information, and so on. The role of discourse particles in relation to the illocutionary force is that of modifying it. For German MPs, the great number of particles sometimes allows for a fine-grained nuancing of the illocutionary force of the same clause. The insertion of a discourse particle does not modify the clause type of the sentence, but it contributes to modifying the speaker's intention.

Coniglio and Zegrean further point out that a certain type of illocutionary force is typically mapped into syntax by means of a specific clause type. Consequently, one can usually observe a one-to-one relationship between clause type and illocutionary force. Thus, for instance, a directive (requesting an action) typically corresponds to an imperative clause, as, for example, in (51). However, it often occurs that an order is indirectly expressed by means of a question for reasons of politeness, as in (52). This is what Searle (1975b) calls "indirect speech acts."

(51) Call the police! ILL = directive CT = imperative

(52) Could you call the police? ILL = directive CT = interrogative

A speech act can therefore be realized by means of a clausal type that does not typically correspond to its illocutionary force.

Moreover, the authors indicate that discourse particles are to be considered main clause phenomena. They can only be licensed in those clauses that are endowed with illocutionary force.

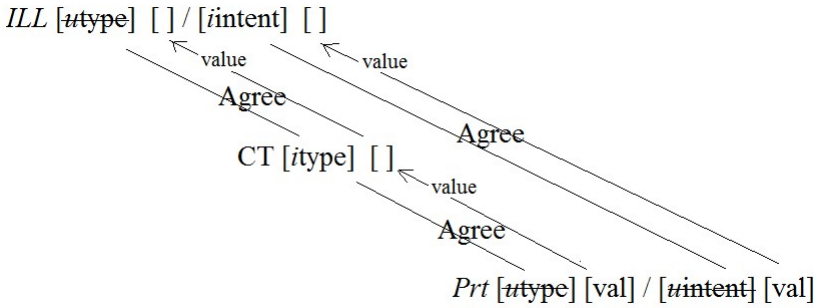
Coniglio and Zegrean's analysis for the syntactic representation of particles and of their relationship with the discourse/pragmatic field on the one hand and with the clausal properties on the other hand relies on the proposal to split up Rizzi's (1997) ForceP. They suggest that the highest projection of the CP layer can be divided into two projections: ILL(ocutionary Force), where the speaker's intentions are encoded, and C(lause) T(ype), where features are present, which ensures the realization of syntactic operations specific to each clause type.

They further suggest that CT must be lower than ILL because CT closely interacts with FinP and with the IP, since it is the projection that conveys information about the syntactic structure of the clause. In addition, ILL is the syntactic projection that encodes the speaker and her attitude or intentions in relation to the discourse. It lies at the interface between syntax and pragmatics and is relevant at the discourse level.

Coniglio and Zegrean make use of the feature valuation mechanism in Pesetsky and Torrego 2007 and assume a discourse particle (Prt) enters the derivation with two uninterpretable valued features: a feature which refers to the speaker's intentions encoded in ILL and one which ensures syntactic compatibility with CT. Accordingly, Prt has an uninterpretable feature [*u*intent(ionality)] related to its function as modifier of the illocutionary force, and an uninterpretable valued feature [*u*type] related to clause type. Based on the observation that all clause types are associated with a specific syntax (i.e., word order), the type feature of CT will be interpretable, but unvalued. The feature needs to get a value from another instance of the same feature, which is present in the derivation. Following these lines of analysis, ILL has an uninterpretable unvalued feature related to the clause type, and an interpretable but unvalued feature related to intentionality, which reflects the modification of the canonical illocutionary force in terms of the speaker's intentions and attitude.

Following Pesetsky and Torrego (2007) in assuming that Agree is a feature-sharing mechanism triggered by unvalued instances of F (whether interpretable, or not), Coniglio and Zegrean propose the Agree mechanism works in main clauses and in subordinates with root properties as follows.

(53)



Under this analysis, Coniglio and Zegrean suggest that the projection ILL is present in a central subordinate, peripheral subordinate, and matrix clause. The reason why illocutionary force is not available in a central subordinate is that the ILL is impoverished of the intentionality features. Moreover, they claim that central subordinates always come with a [intent0] feature and that there are no particles with this [intent0] feature. Consequently, the insertion of an overt particle will cause the derivation of a central subordinate to crash.

2.9.5 Summary

When analyzing the data in question, I will adopt the cartographic approach. Among the two main varieties, I will employ the framework from Haegeman and Hill instead of Speas and Tenny. These two studies principally differ in the order of the utterance and the hearer and in the data for the TSM support for the hearer–preceding–utterance order, as demonstrated in the coming discussion of *leh* (咧).

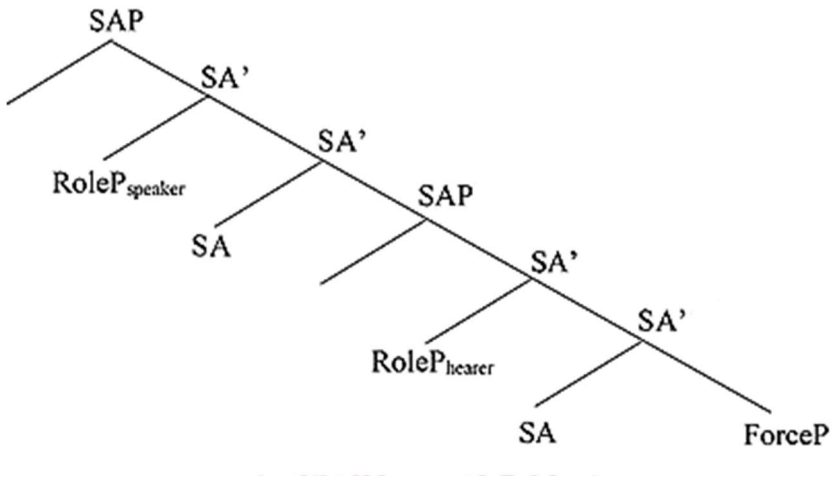
Moreover, following Nasu (2012) and Coniglio and Zegrean (2012), I will distinguish the projection of the illocutionary force from the ForceP explicitly, among which the former is in charge of roles in the conversation, speech act, and speaker attitude, and the latter is purely about clausal typing.

Unlike Haegeman (2014), I will not assign the two speech layer projections with different functions, respectively. According to Haegeman, the higher SAP is "dynamic" and "directional," relating the utterance to an addressee as the one for whom the utterance is intended. In other words, it is more directly related to the performative aspect of the speech act, initiating the hearer–speaker relationship. On the other hand, the lower speech act shell is used to consolidate and to possibly qualify the already established speaker–addressee relationship in relation to the content of the utterance. In

Haegeman's words, it is "stative" and more "attitudinal." Haegeman, therefore, speculates the lower shell is responsible for modulating the (already established) relationship between speaker and hearer and thus corresponds to the Attitude projection identified by some researchers, such as Huang and Ochi (2004) and Paul (2014). However, in my opinion, the lower speech act shell and the Attitude projection should be distinguished from each other, as will be shown in our TSM data.

The basic scheme from where the following investigation sets off is illustrated below.

(54)



2.10 Previous studies on CP and syntax–pragmatics interface in TSM

In this section, we will review the literature on CP and the syntax–pragmatics interface with respect to the elements in TSM.

Among these studies, the majority is of the sentence-final particles. Instead of using a one-by-one listing method, I summarize them in a table based on particles and the descriptions from each researcher, as shown in (55).

Regarding the patterns of sentence-final particle co-occurrence in TSM, Chen (1989) observes that the most frequent combinations are of pairs composed of a tense-aspect particle and a particle of other kinds. Also, Chen 1989 discovers two principles with respect to sentence-final particles in TSM: first, the closer the functions between two particles are to each other, the less probable it is they will co-occur; second, the stronger the denotation of a particle is relevant to speaker attitude, the more probable it is that it will occur at the very end of a sentence.

(55)

Item	Descriptions
à	Chen 1989 1. Denoting a sense from a state of ignorance to a state of knowledge; emphatic; to correct the assumption; to intensify the forcefulness of the order; to indicate a new discovery and surprise. 2. Used in imperatives, interrogatives, and exclamatory sentences to contradict the hearer's claim, to accentuate the wh-question words, and to indicate the speaker's surprise. To lay bare the speaker's doubt or curiosity and inviting response. In disjunctive or Y–N questionsinvolving a clear presupposition that the speaker knows the answers already. 3. Conveying a sense of encouraging, provoking, or proposing ideas.
ā	Chen 1989: To accentuate; to be emphatic; to be obvious; to correct assumptions; to imply perplexity; to encourage; to provoke; to propose. Tin 1934: An interrogative sentence-final particle, equivalent to "ka" in Japanese; intonation adjusting and emphasizing sentence-final particle.[6] Lien 1988: Assertive: Fully certain of rejecting the addressee's presupposition. Directive: Expressing the speaker's surprise or perplexity regarding the addressee's inaction; indicating indifference or resignation on the part of the speaker. The inchoative aspect markers denote a change of state expressing the speaker's resignation and complacency.[7]
ah	Chen 1989: An aspect; a combination of the perfective aspect and current relevance marker; expressing either one or the both.[8] Li 1950: 1. A particle expressing the speaker has been determined; to express ascertaining and sighing. 2. A particle expressing accomplishing; similar to *la*, but with a weaker intonation. 3. A particle expressing wonders; used to express wondering, pleading, begging, or gratitude.[9]
buē/bē[10]	Cheng 1997b: Sentence-final question particle used in non-presumptive questions.
bô	Cheng 1997b: Sentence-final question particle used in non-presumptive questions. Li 1950: An interrogative particle.

[6] It is written as *a* (in Japanese katakana) in Tin 1934.
[7] It is written as *a* in Lien 1988.
[8] It is written as *a* in Chen 1989.
[9] It is written as *a* (in Japanese katakana) in Li 1950.
[10] The two items have different meanings. One is equivalent to "up to now, not yet" in English, and the other means "will not/cannot." In the two main dialects, *Tsuân-tsiu* and *Tsiang-tsiu*, in Taiwan, the two are exactly the reverse.

Item	Descriptions
ê	Li 1950: A particle expressing the speaker has been determined and expressing a determined attitude certainly, and it slightly softens the tone.
ha(nn)	Cheng 1997b: Indicating a sense of doubt. Chen 1989: An speech-act particle of reminding/warning in a question. Chen 1993: 1. Asking for information; revealing the speaker's concern and eagerness. 2. Speech act: Used to reiterate a request. Li 1950: 1. An interrogative particle used in common questions and used in rhetorical questions to express surprises. 2. Used solely as an interjection.
hànn	Chen 1993: A mild warning.
he	Chen 1989: [+emphatic], not appearing in declaratives with deontic modals.
hè	Chen 1989: [+emphatic] Softening the tone and marking a mild reminder; suggesting informality and intimacy. Not appearing in exclamations.
hiòo	Chen 1989: Question particle; it can be used rhetorically. Chen 1993: Question particle; it implies strong assumption; it is often in a rhetorical question and presupposes definite answers; it emphasizes the interest of the speaker in the question.
honnh/ hònn	Cheng 1993: Sentence-final question particle of presumptive questions.[11] Chen 1989: Question particle used in declaratives or imperatives to solicit agreement or consent; also used to pause or used as a topic marker (not sentence-final).[12] Chen 1993: 1. Question particle: soliciting agreement or consent. 2. A topic marker.[13] Li 1950: 1. Used in a pseudo-question and to convey a light exclamation. 2. Used when the speaker wants to obtain a positive response from the addressee. 3. Used in a confirming question. Tin 1934: A particle expressing the speaker is emotionally touched; used to express an exclamation; used to express one's surmise and to ask the addressee to confirm. Also used to explicate a question, to express one's impressions, or to solicit the addressee's impressions.[14] Li 1999: A discourse marker used to tackle the potentially necessary negotiation

[11] It is written as *honn* in Cheng 1997b.
[12] It is written as *hònn* in Chen 1989.
[13] It is written as *honn* in Chen 1993.
[14] It is written as ホオ in Tin 1934.

Item	Descriptions
	Yang 2014: Used to express the mutual agreement when confirming the information.
koh	Cheng 1997b: Indication of warning. Chen 1989: Evaluative adverbial used in declaratives with certain negative markers to strongly contradict the hearer's assumption or assertion, implying a keen sense of irony, disapproval, or sarcasm. Speech-act: used in imperatives to either encourage or provoke. Li 1950: A particle of discussing used mainly to give an order in ironic forms; the intonation is relatively mild and not like an order, but a particle of kindness if it is attached to a declarative sentence; used to express a strong resolution or to ask the intentions of the addressee.[15] Tin 1934: A particle of designation or judgment that expresses a judgment. When attached after a verb, it denotes the perfective aspect.[16] A particle expressing that something is surely supposed to be so, such as when attached to adjectives or adverbs, it denotes certainty, and its intonation is stronger than *la*. Sometimes it follows verbs, adjectives, and nouns to express a sense of judgment.
kóng	Cheng 1997b: Expressing mild insistence on forcing the given information on the addressee; n urging and reminding tone. Chen 1989: Speech-act that is encouraging, provoking, warning, and threatening. An evaluative adverbial that, in declaratives, emphasizes the truthfulness of the proposition; in imperatives, it has the illocutionary force of encouraging, provoking, warning, or threatening. Lien 1988: Used when the new situation that the speaker discovered is contrary to his own expectation. Chang 1998: Reportative and counter-expectation functions. Hsieh & Sybesma 2008: Marking evidentiality and denoting mirativity, observational, or being used as a reportative marker.
lah	Cheng 1997b: Strong insistence on forcing the given information on the addressee.[17] Chen 1989: Evaluative adverbial regarding insistence, impatience or frustration, friendliness, and solidarity; bearing the strongest epistemic commitment to the truth of a statement. Attitudinal in stressing baffledness, exasperation, disapproval, bewilderment, impatience/familiarity, and friendliness in questions. Speech-act: performing the act of proposing, combined with some elements to perform a warning.[18]

[15] It is written as コオ in Li 1950.

[16] Tin (1934) also claims *koh* has a similar usage to *na* '哪,' but we cannot find the introduction of SFP *na* therein.

[17] It is written as *la^{o} in* Cheng 1997b.

[18] It is written as *là* in Chen 1989.

Item	Descriptions
	Li 1950: A particle expressing the speaker has been determined. When appearing in a sentence, it denotes the addresser has fully expressed what he wants to say. A particle of perfective sense assisting the tone of an accomplished judgment, and what it expresses is not a temporal relationship, but simply denoting the end of a statement. It also assists in expressing the tones of the perfective aspect in the past, present, and future tenses. A particle of discussing used to denote discussing, hoping, instigating; also used to express a tone of forbidding.[19] Tin 1934: A particle of expressing designation or judgment; expressing certainty or confirming the statement; expressing deep lamenting; and inducing denoting.[20] Lien 1988: In assertives, it expresses the implication that the addressee should have known something he has not yet been aware of. In directives, the speaker has an event performed by the addressee against the background of the latter's resistance or reluctance to the execution of the action.[21] Yang 2014: Assertion is the core meaning with two usages: 1. In assertion, exclamation, and directive sentences, it is used to emphasize the state of affairs if the proposition has not been activated at the utterance time. 2. In -expressives and interrogatives, the particle interacts with the illocution type and intensifies what is already expressed in the illocution type.
lè/le/leh	Cheng 1997b: 1. Sentence-final question particle of non-presumptive wh-questions. 2. Strong insistence on forcing the given information on the addressee.[22] Chen 1989: 1. Aspect: A delimitative aspect, such as doing an action "a little bit" or for a short period of time. 2. Attitudinal: It intensifies the forcefulness of the swears or serves to reject the hearer's claim. 3. Evaluative adverbial: Emphatic, it frequently contradicts the hearer's assumption or the speaker's earlier expectation; denial. 4. Question particle: It appears in a question, and it can be omitted. Chen 1993: Question particle: It refers to asking, contradicting assumptions/the hearer's expectation, manifesting one's eagerness and inviting response from the listener, and is in a question, and it can be omitted.[23] Li 1950:

[19] It is written as *la* (in Japanese katakana) in Li 1950.
[20] It is written as *la* (in Japanese katakana) in Tin 1934.
[21] It is written as *la* in Lien 1988.
[22] It is written as *le* in Cheng 1997b.
[23] It is written as *le* in Chen 1993.

Item	Descriptions
	1. A particle expressing the speaker has been determined, and it brings in a sentiment of discussion in a peaceful way 2. A particle denoting perfective sensethat is equivalent to "loo," but it is only used in past and present tenses; when it denotes the perfective sense in the subjunctive mood, it is pronounced with the third tone in Taiwanese. This usage is similar to "tsi̍t-ē," but is not completely the same.[24] Tin 1934: 1. An interrogative particle denoting a question; used to express a comparing sense. 2. A particle of forbidding order that denotes an order; also used to adjust or strengthen the intonation. 3. A particle of adjusting or strengthening the intonation.[25] Lien 1988: 1. Assertive; the speaker intends to contradict the addressee's implicit assumption or explicit assertion; no discovery of a new situation is involved, and since the speaker is not quite sure of his position now, that position can be furthered falsified. 2. When it is pronounced with a high-level tone as "le$_{55}$", it is used to reject the addressee's presupposition, but not sure of his own position; "le$_{55}$" is less assertive than "la" (see Tsao Feng-fu's comment on pp.236). 3. Directive; it includes intending to press upon the addressee; denoting tentativeness as a downtoner; denoting continuative aspect.[26] Li 1999: Denying the implicature or negative assertion from the addressee. Chen 2011: Marking the contrast between the proposition and the expectation from the speaker or the addressee. Yang 2014: Expressing the difference in the expected background between the speaker and the addressee, and being used to guide the addressee to give an assumptive response.
liòo	Chen 1989: 1. speech act: to remind or to advise 2. Q Chen 1993: 1.speech act: to remind or to advise 2. Q: ask for information

[24] It is written as *le* (in Japanese katakana) in Li 1950.
[25] It is written as *le* (in Japanese katakana) in Tin 1934.
[26] It is written as *le* (in Japanese katakana) in Lien 1988.

Item	Descriptions
lòo	Cheng 1997b: Indication of objection or complaint.[27] Chen 1989: 1. Aspect marker, associating with pomposity, prestige, or extravagance in some contexts; implying the speaker's enthusiasm and concern. 2. The evaluative adverbial is a matter of course, rebutting the hearer's assumption and expressing the same attitude of concern and lukewarmness. 3. The question particle is softening the tension, hostility, and graveness; rebutting the hearer's assumption and express the same attitude of concern and lukewarmness. Chen 1993: Asking, soft-spoken and friendly; contributing to a soft-spoken tone, suggestive of friendliness; softening the tension, hostility, and graveness; toning down the potential hostility.[28] Li 1950: A particle expressing accomplishments, the same as "la" but having a strong feeling of pouring out something.[29] Tin 1934: A particle of designation or judgment; expressing certainty and stronger than "la".[30] Lien 1988: Inchoative aspect markers denoting a change of state; expressing the speaker's zest and concern; suggesting a sense of pomposity or extravagance.[31] Chang 2002: 1. Seeking confirmation. 2. Showing assertion, frame setting, and strong assertion.
m̄	Chang 1997: 1. Marking a piece of inference. 2. Marking a rhetorical question. 3. Signaling a strong assertion of a contextually inferable proposition. Cheng 1997b: 1. Sentence-final question particle of non-presumptive questions. 2. Sentence-final question particle of presumptive questions. Huang 2000: Its interpretations are determined by the information states of the discourse participants and its sequential placement in discourse.
mah	Cheng 1997b: Strong insistence on forcing the given information on the addressee.[32] Chen 1989: 1. A polysemic characterized by the properties [+dogmatic & impatient and/or feminine delicacy and coyness] 2. Attitudinal characterized by accentuating the directive mood, also implying a note of impatience; feminine charm and coyness. 3. Evaluative adverbial characterized by expressing a dogmatic assertion, such as "I am telling you X; X is a matter of course, and I

[27] It is written as *lo* in Cheng 1997b.
[28] It is written as *loo* in Chen 1993.
[29] It is written as *loo* in Li 1950.
[30] It is written as *loo* in Tin 1934.
[31] It is written as *loo* in Lien 1988.
[32] It is written as *ma* in Cheng 1997b.

Item	Descriptions
	am completely sure of X." Female speakers use it to show her delicacy, softness, or coyness.[33] Li 1950: An interrogative particle used mostly in rhetorical questions; when used with a relatively gentle intonation, it denotes expressions such as "isn't it?" or "It is!"[34] Tin 1934: An interrogative particle used in a question or a sentence, such as a question with irony or a conjecture.[35]
m-me (me)	Li 1950: An interrogative particle expressing a strong rhetorical mood. Sometimes it is used in a common question.
neh	Cheng 1997b: Mild insistence on forcing the given information on the addressee.[36] Chen 1989: [warm and amicable] 1. Evaluative adverbial, making emphatic but warm and amicable assertions; it can serve to remind. 2. Attitudinal in directives or wh-questions, expressing a warm and amicable attitude. Taking on an additional emotive coloring of feminine charm and coyness. 3. Question particle turning a declarative sentence into a Y–N question, revealing a warm and amicable attitude with a tone of concern. 4. Topic marker (not sentence-final).[37] Chen 1993: 1. Question particle: Asking, warm and amicable; a tone of concern. 2. Topic marker.[38]
nih	Chen 1989: Question particle marking Y–N question and ordinarily presupposes self-evident answers in the speaker's mind.[39] Chen 1993: Used to presupposes self-evident answers.[40] Li 1950: An interrogative particle used in disjunctive questions and wh-questions, also used in a declarative sentence with its predicate eclipsed; this particle is also attached to a common question to soften the tone; it is also used rhetorically or used in an exclamation and expresses a mood of telling intimately. This particle is inserted between the subject and the predicate in a declarative sentence to soften the tone.[41] Tin 1934: Sentence-final interrogative particle used to inquire and used to express comparison.[42]

[33] It is written as *ma3* in Chen 1989.
[34] It is written as *ma* in Li 1950.
[35] It is written as *ma* in Tin 1934.
[36] It is written as *ne* in Cheng 1997b.
[37] It is written as *ne3* in Chen 1989.
[38] It is written as *ne* in Chen 1993.
[39] It is written as *ni3* in Chen 1989.
[40] It is written as *ni3* in Chen 1993.
[41] It is written as *nì* (in Japanese katakana) in Li 1950.
[42] It is written as *nì* (in Japanese katakana) in Tin 1934.

Item	Descriptions
nòo	Cheng 1997b: Strong insistence on forcing the given information on the addressee.[43] Chen 1989: Evaluative adverbial, sharing almost the same meaning with "lòo," implying the statement is taken for granted by the speaker. Attitudinal in displaying friendliness, politeness, and solidarity. Li 1950: A particle expressing the speaker's determination; assisting in expressing sympathy; expressing certainty with a kind mood.[44]
òo	Chen 1989: 1. Suggesting a sudden realization or discovery on the part of the speaker: "I now realize X, or I just found out about X." 2. Speech-act: to request, suggest, encourage, or remind; mitigating an order to become reminding and encouraging, giving a sense of hospitality. 3. Question particle asking for confirmation of a statement; forming Y–N questions, especially rhetorical ones. 4. Evaluative adverbial used in an exclamation responding to questions. Chen 1993: Question particle; asking (confirmation question-tag); asking for a confirmation of a statement: "Did I hear you right?" Li 1950: Interrogative particle; attached to a quasi-question to express mild interjection to request the addressee's consent; used in a rhetorical question. It can be used solely as exclamation. Tin 1934: A particle adjusting or strengthening the intonation.
ôo	Cheng 1997b: Indication of warning.[45] Chen 1989: Speech-act: A reminder; mitigating a command's forcefulness to become warmth and concern; used to remind, propose, warn, provoke, or threaten. Li 1950: A particle of discussion; expressing orders, instigating, warning, and reminding mood. Tin 1934: A particle of forbidding order; expressing orders, prohibitions. It is also used to strengthen or adjust the intonation. Lien 1988: Advising or warning the addressee about something detrimental that will occur if the advice or warning is not heeded.
sī--bô	Cheng 1997b: Sentence-final question particle of presumptive questions.
sio	Cheng 1997b: Sentence-final question particle of presumptive questions.
suah	Cheng 1997b: Strong insistence on forcing the given information on the addressee.
suah niā-niā	Li 1950: A particle expressing the speaker has been determined; used to express a manner of speech when making a concession and non-interference under limited determination.
tsi̍t-ē	Li 1950: A particle expressing speaker's determination; used to express determination with a bit of sensation.

[43] It is written as *no* in Cheng 1997b.
[44] It is written as *noo* (in Japanese katakana) in Li 1950.
[45] It is written as *o* in Cheng 1997b.

Item	Descriptions
u	Cheng 1997b: Strong insistence on forcing the given information on the addressee.
uè	Chen 1989: Attitudinal and emphatic, only found in the exclamatory sentences consisting of kinship terms.
tō-sī/tio̍h-sī tsiah-sī bî-sī	Li 1950: A particle expressing the speaker's determination; used to give a promise or make a request with a manner of speech of determination. Lien 1988: "tio̍h-sī" is used to suggest what action is to be taken and with no further ado.
koh-le	Lien 1988: Used to cast doubt on the justification of the question and consequently refute it as a whole

Aside from sentence-final particles, researchers also have noticed elements in CP that occur elsewhere. For example, Simpson & Wu 2002 and Hsieh & Sybesma 2008 point out that *kóng* (講)—the saying verb in TSM—is also used as a complementizer; Lau (2013) argues that this element is also employed as a topic marker in the left periphery. Thanks to the prevalence of tone sandhi, the final and non-final particles in TSM have long been used as critical evidence for the anti-symmetric structure deformed by IP (or CP) raising and multiple spell-out (refer to Bošković 2016 for a review in addition to his proposal). In addition to these particles, Yang 2015 claims that the determiner phrase *hit-hō* (彼號) has gone through a grammaticalization process and is used as a discourse marker.

Regarding speech-acts, the sequential studies on the exclamatory sentence patterns and functions in TSM by Liu and Lien (2006), Chao (2008), and Chao (2009) help us extend our knowledge and understanding of the syntax–pragmatics interface from a different perspective.

In contrast to the rich inventory of function words relevant to the discourse and syntax–pragmatics interface, there are still many to explore when it comes to the language. This is exactly what the dissertation aims to do: to chart the uncharted territory at the syntax–pragmatics interface with the help of elements that have drawn no attention to relatively less attention so far.

2.11 Summary

As shown from 2.2 to 2.9, different approaches have been used to deal with issues and elements relevant to the syntax–pragmatics interface. Among various theories in the market, this study will adopt the cartographic approach, especially the

variety of Haegeman (2014) as the framework to pursue adequate analyses in the following chapters. This is not only because the cartographic approach provides a more illuminating solution by accommodating the entire spectrum of effects displayed by the left periphery in the Sinitic languages, which is characterized with a more "analytic" strategy to represent the scope relation (Tsai 2015a), but because in a study that is mainly syntactic-oriented, the cartographic approach offers an explicit way to delimit the positions of the elements targeted herein.

Based on Haegeman's 2014 scheme, which is a revision from Speas & Tenny 2003, I follow Coniglio and Zegrean 2012 (see 2.9.4) to distinguish the projection of illocutionary force from the projection of clause typing. In this sense, ForceP is only in charge of clause types and the derivation of extra illocutionary force is attributed to some other higher projections.

In the following chapters, we will see how the data can be analyzed in this framework, and vice versa. We will also see how the data in this language offers insight and empirical support for the advancement of research in the syntax–pragmatics interface from a theoretical perspective.

CHAPTER 3 THE EMBODIMENT OF THE SPEECH-ACT SHELL

In this chapter, we will look into some colloquial usages of *leh* (咧)[46] in TSM. Not noted in previous studies, these usages are quite different from *leh* (咧), which, as mentioned in the predominant analysis, is a progressive aspect marker and the counterpart of *zài* (在) in MC.

Unlike the data from other languages, which has been analyzed with the speech-act shells proposed by Speas and Tenny (2003), the usage of the hierarchically highest two *leh*s (咧) are not vocatives markers. They are true interconnectors of pragmatics and syntax, and they can be observed in surface syntax. With the overtly embodiment of speech act shells, TSM is a real Speas-Tennian language.

After reviewing some previous studies in 3.1, some empirical data in 3.2 will show that *leh* (咧) is more than an aspect marker. In 3.3, we will pinpoint the non-aspect *leh* (咧) in syntax based on the cartographic framework adopted in this dissertation. Section 3.4 is devoted to deliberating the semantics of *leh* (咧) when it does not appear to be an aspect marker, and 3.5 summarizes this chapter.

3.1 Previous studies

Before the aspect usage of *leh* (咧) began to draw attention, researchers noted its counterpart in Mandarin (*zài*; 在) for quite a long period of time. Among them, Chao (1968) suggests that *zài* (在) is a verb with an omitted argument, *nall* (那兒; Pinyin: *nar*) "right there." According to Chao, it is the omitted argument that attributes a progressive meaning to the sentence.

In Smith 1994, *zài* (在) is analyzed as a progressive marker. Smith claims that there are three types of imperfective viewpoints: the progressive *zài* (在), the stative imperfective *zhe* (著), and the zero imperfective. None of them present the initial and final point of a situation, and they only make the internal part of the situation visible. Unlike the other two, *zài* (在) occurs only with non-stative situations. The situation

[46] There are variants, like *teh* and *tih*, used by some speakers. To prevent confusion, I will stick to *leh* in this dissertation.

attached with *zài* (在) has a dynamic property, and the interval of the situation contains successive stages.

In their book for MC grammar, Li and Thompson (1981) propose that both *zài* (在) and *zhe* (著) are durative markers that indicate an ongoing event. However, when *zài* (在) precedes a noun phrase, it serves as a locative coverb.

Following Chao (1968), Tsai (2012) argues that *zài* (在) is a locative verb that takes a locative argument. The locative argument can be empty or lexically realized. When *zài* (在) serves as a progressive marker, it moves to the head position of AspP. Furthermore, *zài* (在) can also take another verb phrase as its argument. In this case, the locative argument may be relocated to Spec of VP. Consequently, the word order is [*zài* (在) + a locative phrase + a verb phrase].

As a pioneer researcher on *leh* (咧) in TSM, Huang (1958) suggests that *leh* (咧) is more of a content word than a function word. When it is used as a function word, it is a durative aspect. Huang also noticed the disyllabic form *tī-leh* (佇咧) in some dialects and analyzed it as being in a state between a content word and a function word.

Regarding the etymology of *leh* (咧), there are two current propositions. The first considers *leh* (咧) as a derivative of the verb *tio̍h* (著) "to attach," according to Yang (1992). In her analysis, *leh* (咧) can be used either as a durative or as an anterior aspect marker. On the other hand, Chen (2015) and Lien (2015a) argue *leh* (咧) to be a product from the grammaticalization of a location marker *tè* (處). Lien notes that, as a locative word, *tè* (咧) cannot be referential unless it is coupled with demonstratives. When this locative word is unadorned by demonstratives, it tends to lead to an aspectual marker. In Lien's analysis, *leh* (咧) functions as a continuative aspect marker in the post-verbal position, whereas it can be construed as a progressive or continuative aspect marker in the preverbal position. Moreover, it often takes on an additional imperative force as a post-verbal continuative aspect marker, as observed by Lien.

To my knowledge, previous studies have never touched on the usages of *leh* (咧) other than its occurrence as an aspect. In the following, I will first demonstrate the data of non-aspectual preverbal *leh* (咧) in TSM.

3.2 Empirical data

To have a glance of the whole picture, let us take stock in the first place. Colloquially, TSM speakers employ the following phrases in (1)a, (2)a, and (2)c with *leh* to express certain connotations:

(1) a. Guá (leh) lí leh! (TSM)
I LEH you LEH
我 咧 你 咧

b.* Lí (leh) guá leh!
you LEH I LEH
你 咧 我 咧

(2) a. Guá leh!
I LEH
我 咧

b.* Lí leh!
you LEH
你 咧

c. Lí sī leh!
you SI LEH
你 是 咧

Unlike (1)a, (1)b is ungrammatical due to the inverted order of the two pronouns. Further, (2)a indicates that a short from of (1)a is possible, though it must be in the first half, as shown by the infelicity of (2)b. Moreover, with an additional *sī* (是) exemplified in (2)c, it becomes possible to solely use the second person singular pronoun in contrast to (2)b. Based on these instances, intuitively, there seems to be three different *leh* (咧) at work.

Putting aside the *leh* (咧) employed as a grammatical aspect, (3)a exhausts all the available positions of preverbal *leh*-s (咧), followed by several similar examples; they differ in either the manipulated word order or that part of (3)a is omitted.

(3) a. Guá **leh**[1] lí **leh**[2] kin-á-jit sī **leh**[3] bô-tāi-bô-tsì **leh**[4]
I LEH you LEH today be LEH without.a.reason LEH

我	**咧[1]**	你	**咧[2]**	今仔日	是	**咧[3]**	無代無誌		**咧[4]**
lo̍h	siánn-mih		hōo!						(TSM)
fall	what		rain						
落	啥乜		雨						

"Gosh! Did you see it?! It's damned raining crazily today!"

b.* Guá	**leh[1]**	lí	**leh[2]**	i	**leh**	kin-á-jit	sī	**leh[3]**	
I	LEH	you	LEH	he	LEH	today	be	LEH	
我	**咧[1]**	你	**咧[2]**	伊	咧	今仔日	是	**咧[3]**	
bô-tāi-bô-tsì			leh	lo̍h	siánn-mih		hōo!		
without.a.reason			LEH	fall	what		rain		
無代無誌			**咧[4]**	落	啥乜		雨		

c.* Lí	**leh[1]**	guá	**leh[2]**	kin-á-jit	sī	**leh[3]**	bô-tāi-bô-tsì	**leh[4]**
you	LEH	I	LEH	today	be	LEH	without.a.reason	LEH
你	**咧[1]**	我	**咧[2]**	今仔日	是	**咧[3]**	無代無誌	**咧[4]**
lo̍h	siánn-mih		hōo!					
fall	what		rain					
落	啥乜		雨					

d.* Lí	**leh[2]**	kin-á-jit	sī	**leh[3]**	bô-tāi-bô-tsì	**leh[4]**	lo̍h	
you	LEH	today	be	LEH	without.a.reason	LEH	fall	
你	**咧[2]**	今仔日	是	**咧[3]**	無代無誌	**咧[4]**	落	
siánn-mih		hōo!						
what		rain						
啥乜		雨						

e. Guá	**leh[1]**	kin-á-jit	sī	**leh[3]**	bô-tāi-bô-tsì	**leh[4]**	lo̍h	
I	LEH	today	be	LEH	without.a.reason	LEH	fall	
我	**咧[1]**	今仔日	是	**咧[3]**	無代無誌	**咧[4]**	落	
siánn-mih		hōo!						
what		rain						
啥乜		雨						

This set of examples confirms our intuition mentioned previously. In (3)b, the ungrammatical sentence with an additional *leh* (咧) preceded by a 3rd person singular pronoun illustrates the rigid selection of pronouns of *leh* (咧). In (3)c, the

ungrammaticality indicates the fixed order of the pronouns preceding *leh*^{1} (咧) and *leh*^{2} (咧) (1st.SG.pronoun *leh*^{1} > 2nd.SG.pronoun *leh*^{2}). The last two sentences in (3) demonstrate that *leh*^{2} (咧) cannot be used without *leh*^{1} (咧), but not vice versa.

In a nutshell, the distribution and restrictions can be presented as below:

(4) *(1SG *leh*^{1}) > (2SG *leh*^{2}) > *3SG *leh* > subj. *(*sī*) *leh*^{3} > *leh*^{aspect}

The functions of non-aspect *leh*s can be further illustrated with these examples:

(5) Context: A coach who is waiting eagerly to see an athlete win a medal in the 100-meter dash believes that he will win one. However, he is shocked to see the athlete fall on the running track and he says:

a.	I	sī	leh	puàh-tó	án-tsuánn	--lah!	(TSM)
	he	SI	LEH	fall	how	PRT	
	伊	是	咧	跋倒	按怎	啦	

"How the heck can he fall?"

b.#	Guá	leh	i	puàh-tó	--ah!
	I	LEH	he	fall	ASP
	我	咧	伊	跋倒	矣

"Gosh! He fell!"

Unlike (5)a, which is composed of *sī* (是) and *leh*^{3} (咧) and appropriately expresses the negative emotion from the situation's impact, the infelicitous (5)b is too weak, for *leh*^{1} (咧) and *leh*^{2} (咧) are not necessarily linked to negative emotion. Instead, they only denote the noticeability of the situation with respect to the speaker and the hearer.

Before we proceed, we should note that these *leh*s (咧) are not equivalent to sentence/phrase-final particle, *leh*^{0}(咧), on which the tone is neutralized, in contrast to the high-level tone observed on *leh*$^{1\text{-}4}$ (咧). Example (6) exemplifies the sentence/phrase-final particle *leh*^{0} (咧).

(6)	a. Lí	--leh^{0},	lí	kám	bô	beh	khì?	(TSM)
	you	PRT	you	Q	not	will	go	
	你	咧^{0}，	你	敢	無	欲	去	

"How about you? Won't you go?"

b. Guá tsiah bô beh tshap --lí --leh^{0}!
I PRT not will pay.attention.to you PRT
我 才 無 欲 插 你 咧^{0}
"I don't even want to talk to you!"

In the rest of this chapter, I will leave the aspect *leh*^{4} (咧) and the final particle *leh*^{0} (咧) aside, and focus on *leh*^{1} (咧), *leh*^{2} (咧), and *leh*^{3} (咧).

3.2.1 Usages that lack attributes of progressive/durative/imperfect aspects

Homonymous *leh*^{1} (咧), *leh*^{2} (咧), and *leh*^{3} (咧) are very different from the aspect *leh*^{4} (咧). Whatever kind of aspect in which we analyze *leh*^{4} (咧), either as a progressive marker, a durative marker, or an imperfect, it is clear that the three high *leh*s behave quite differently.

To demonstrate their discrepancies, we can employ some non-volitional verbs whose processes cannot be intentionally prolonged, and some verbs of individual state (unbound; Depraetere 1995) and predicate as it regards change of state.

(7) a. * I leh^{4} puàh-tó. (TSM)
he LEH stumble
伊 咧^{4} 跋倒
(Intended) "He is falling down."

b. Tsuí-sūn sī **leh^{3}** puàh-tó án-tsuánn!
Tsuisun be LEH stumble how
水順 是 **咧^{3}** 跋倒 按怎
"How the heck could Tsuisun fall!"

c. Guá **leh^{1}** Tsuí-sūn i bô lâi siōng-pan!
I LEH Tsuisun he not come work
我 **咧^{1}** 水順 伊 無 來 上班
"Damn! Tsuisun did not come to work!"

(8) a. * I **leh^{4}** hūn --khì. (TSM)
he LEH faint ASP
伊 **咧^{4}** 昏 去
(Int.) "He is losing consciousness."

b. I sī **leh^{3}** hūn --khì hūn khì án-tsuánn?

	he	be	LEH	faint	ASP	faint	ASP	how
	伊	是	**咧 3**	昏	去	昏	去	按怎

"How the heck could he faint!"

c.	Guá	**leh1**	lí	**leh2**	i	hūn	--khì	--ah!
	I	LEH	you	LEH	he	faint	ASP	ASP
	我	**咧 1**	你	**咧 2**	伊	昏	去	矣

"OMG! See! He has lost consciousness!"

Examples in (7) and (8) illustrate the contrast of compatibility between non-volitional verbs, *fall* and *faint* and *leh* (咧). When *leh* (咧) functions as an aspect (in (7)a and (8)a), the co-occurrence induces ungrammaticality. However, we observe no incompatibility in (7)b-c and (8)b-c, in which the higher *leh*s (咧) are present.

Below are examples of individual state verbs.

(9) a.* I **leh4** bat kuè-kè. (TSM)

	he	LEH	know	accounting
	伊	**咧 4**	捌	會計

(Intended) "He knows accounting."

b.	I	sī	leh3	bat	siánn	kuè-kè!
	he	be	LEH	know	what	accounting
	伊	是	咧 3	捌	啥	會計

"He knows shit about accounting!" or "What the heck does he know accounting for!?"

c.	Guá	**leh1**	i	bat	kuè-kè!
	I	LEH	he	know	accounting
	我	**咧 1**	伊	捌	會計

"OMG! He knows accounting!"

(10) a.*I **leh4** ē-hiáu sái tsûn. (TSM)

	he	LEH	can	drive	boat.
	伊	**咧 4**	會曉	駛	船

(Int.) "He can sail a ship."

b.	Lí	sī	**leh3**	ē-hiáu	siánn!
	you	be	LEH	can	what

你 是 **咧**[3] 會曉 啥

"You can do shit!"

c. Guá **leh**[1] lí **leh**[2] lí ē-hiáu sái tsûn!

I LEH you LEH you can drive boat

我 **咧**[1] 你 **咧**[2] 你 會曉 駛 船

"OMG! You rock! You can sail a ship!"

The contrast emerges in (9) and (10) as well. These verbs fail to co-occur with the aspectual usage of *leh* (咧), but they have no problem with the other usages of preverbal *lehs* (咧).

Now let us turn to change-of-state predicates.

(11) a.*Guán **leh**[4] tsia̍h pá --ah. (TSM)

we LEH eat full ASP

阮 **咧**[4] 食 飽 矣

(Intended) "We are full."

b. Lín sī **leh**[3] tsia̍h pá tsia̍h ántsuann!

you be LEH eat full eat how

恁 是 **咧**[3] 食 飽 食 按怎

"What the heck you have had your meal for!"

c. Guá **leh**[1] lí **leh**[2] in lóng tsia̍h pá --ah!

I LEH you LEH they all eat full ASP

我 **咧**[1] 你 **咧**[2] 恁 攏 食 飽 矣！

"OMG! You see! They all have had their meal!"

As shown in (11), again, only usages other than the aspect *leh* (咧) can be present with a change-of-state predicate.

Last but not least, *leh*[3] (咧) can be used in a context that has nothing to do with progressive aspectual reading.

(12) A: Lí kám tsai-iánn Tsuí-sūn hā-pan tńg --lâi (TSM)

you Q know Tsuisun get.off.work turn come

你 敢 知影 水順 下班 轉 來

tsi̍t ê lâng bih tī pâng-king khàu.

	one	CL	person	hide in	room	cry	
	一	个	人	覕	佇 房間	哭	

"Do you know that Tsuisun locked himself in the room and cried after returning from work?"

B:	I	sī	leh	khàu	án-tsuánn!	Khȧp-bē-tio̍h	tō	khàu!
	he	be	LEH	cry	how	apt.to	then	cry
	伊	是	咧	哭	按怎	磕袂著	就	哭

"What the heck did he cry for? He's such a crybaby!"

In the conversation above, the crying event has already finished. In the reply in B, there's no progressive aspectual reading at all (at least, that is not the only one possible reading).

In sum, we have seen that there are four preverbal *lehs* (咧), including the aspect one. The linearly first and second *leh*s (咧) are preceded by a first person singular and a second person singular pronoun respectively, and the order is fixed. The *leh*^{2} (咧), which is accompanied by a second person singular pronoun, is dependent on *leh*^{1} (咧) and preceded by a first person singular pronoun. None of these *lehs* (咧) are the homonymous particle which we find phrase- or sentence-final. Additionally, the relatively higher ones should be distinguished from the aspect one, based on their compatibility with the several types of predicates.

3.3 The syntax of non-aspect *leh*-s

In this section, I will try to locate the positions of *leh*$^{1\text{-}3}$ (咧) under the cartographic framework. Regarding the sentential left periphery, Ernst (2014) provides a basic order of adverbials in MC, another Sinitic language. I will refer to this sequence in the following investigation.

(13) Discourse-oriented > Evaluative > Epistemic > Subject-oriented >Manner / degree (Ernst 2014:52 (6))

3.3.1 *Leh*^{3}

To pinpoint the position of *leh*^{3} (咧), we first need to investigate the relative positions between this element and other adverb(ial)s.

The relative orders between *leh*^{3} (咧) and the speech-act adverbs, evaluatives, evidentials, and epistemics are examined in the following instances.

(14) speech-act > *leh*^{3} (咧)

A: I ē-hiáu tàu tsò. Hōo i lâi tàu-sann-kāng. (TSM)
he can help do let he come help
伊 會曉 鬥 做 予 伊 來 鬥相共
"He knows how to help. Let him give a hand."

B-1. Láu-sit-kóng i sī **leh**^{3} ē-hiáu siánn!
frankly he be LEH can what
老實講 伊 是 咧 會曉 啥
"Frankly, what the heck can he do?"

B-2.* I sī **leh**^{3} láu-sit-kóng ē-hiáu siánn!
he be LEH frankly can what
伊 是 咧 老實講 會曉 啥

(15) *leh*^{3} (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**^{3} hó-ka-tsài ū siám án-tsuánn!
abominable he be 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**^{3} ū siám án-tsuánn!
abominable he be fortunately LEH have dodge how
可惡 伊 是 好佳哉 咧 有 閃 按怎

(16) *leh*^{3} (咧)> evidential

A. I bîng-bîng sī **leh**^{3} bú-jio̍k --lán. (TSM)
he evidently be LEH humiliate we
伊 明明 是 咧 侮辱 咱

"Evidently he was humiliating us."

B-1.	Kuè-hūn!	I	sī	**leh**^{3}	bîng-bîng	bú-jio̍k	lán	án-tsuánn!
	excessive	he	be	LEH	evidently	humiliate	us	how
	過份	伊	是	咧	明明	侮辱	咱	按怎

"That's too much! What the heck does he humiliate us for?"

B-2.*	Kuè-hūn!	I	sī	bîng-bîng	**leh**^{3}	bú-jio̍k	lán	án-tsuánn!
	excessive	he	be	evidently	LEH	humiliate	us	how
	過份	伊	是	明明	咧	侮辱	咱	按怎

(17) *leh*^{3} (咧) > epistemic

A.	In	huān-sè	sing	tsáu	--ah.	(TSM)
	they	perhaps	first	run	ASP	
	恁	凡勢	先	走	矣	

"Perhaps they have left."

B-1.	In	sī	**leh**^{3}	huān-sè	sing	tsáu	án-tsuánn!
	they	be	LEH	perhaps	first	run	how
	恁	是	咧	凡勢	先	走	按怎

"How come have they left before for!?"

B-2.*	In	sī	huān-sè	**leh**^{3}	sing	tsáu	án-tsuánn!
	they	be	perhaps	LEH	first	run	how
	恁	是	凡勢	咧	先	走	按怎

From the examples above, we learn that *leh*^{3} (咧) precedes evaluatives, evidentials, and epistemics, except in cases with speech act adverbials.

The following sets of instances demonstrate where *leh*^{3} (咧) occurs relative to repetitive adverbs and subject-oriented adverbs.

(18) *leh*^{3} (咧) > repetitive

a.	Tsuí-sūn	sī	**leh**^{3}	tit-tit	puá̍h-tó	án-tsuánn!	(TSM)
	Tsuisun	be	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**^{3}	puá̍h-tó	án-tsuánn!	(TSM)
	Tsuisun	incessantly	be	LEH	fall	how	

水順　直直　是　咧　跋倒　按怎

(19) *leh*^{3} (咧) > subject-oriented

a. Tsuí-sūn sī **leh**^{3} gōng-gōng-á hông phiàn án-tsuánn! (TSM)
Tsuisun be LEH stupidly PASS cheat how
水順 是 咧 戇戇仔 予人 騙 按怎！
"How come Tsuisun was fooled so stupidly!"

b.* Tsuí-sūn gōng-gōng-á sī **leh**^{3} hông phiàn án-tsuánn!
Tsuisun stupidly be LEH PASS cheat how
水順 戇戇仔 是 咧 予人 騙 按怎

The pairs of contrasts above illustrate that *leh*^{3} (咧) is higher than both repetitive and subject-oriented adverbs.

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

(20) epistemic > subject-oriented

a. Tsuí-sūn huān-sè gōng-gōng-á tuè lâng khì --ah. (TSM)
Tsuisun perhaps stupidly follow person go ASP
水順 凡勢 戇戇仔 綴 人 去 矣
"Perhaps Tsuisun has stupidly followed them."

b.* Tsuí-sūn gōng-gōng-á huān-sè tuè lâng khì --ah.
Tsuisun stupidly perhaps follow person go ASP
水順 戇戇仔 凡勢 綴 人 去 矣

Based on (20), we can confirm Ernst's (2014) observation between epistemics and subject-oriented adverbs.

To sum up what we have observed in accordance with (13) with Ernst, we can pinpoint *leh*^{3} (咧) in (21).

(21) Speech act > *leh*^{3} (咧) > Evaluative > Epistemic > Subject-oriented >Manner

3.3.2 *Leh*[1] and *leh*[2]

As it regards to *leh*[1] (咧) and *leh*[2] (咧), recall that *leh*[1] (咧) obligatorily precedes *leh*[2] (咧), and that *leh*[2] (咧) cannot go without *leh*[1] (咧). The following sentences illustrate the fixed order between *leh*[2] (咧) and speech act adverbs.

(22) *leh*[2] (咧) > speech-act

a. Guá **leh[1]** lí **leh[2]** láu-sit-kóng i ū-iánn tsiok hó-ūn! (TSM)
I LEH you LEH frankly he really very lucky
我 咧 你 咧 老實講 伊 有影 足 好運
"Gosh! You see! Frankly he is really so lucky!"

b.* Guá **leh[1]** láu-sit-kóng lí **leh[2]** i ū-iánn tsiok hó-ūn!
I LEH frankly you LEH he really very lucky
我 咧 老實講 你 咧 伊 有影 足 好運

As shown in (22), *leh*[2] (咧) has to precede speech-act adverbials just like *leh*[3] (咧).

What if there is a focused constituent or an aboutness topic in the sentence? Will *leh*[2] (咧), and consequently *leh*[1] (咧), occur before or after them?

Below are a set of examples that involve contrastive focus.

(23) *leh*[2] (咧) > focus

a. Guá **leh[1]** lí **leh[2]** i sī tsa-hng puàh su kiáu,
I LEH you LEH he FOC yesterday fall lose gamble
我 咧 你 咧 伊 是 昨昏 跋 輸 筊
m̄-sī tsa̍h--ji̍t --lah! (TSM)
not-be the.day.before.yesterday PRT
毋是 昨日 啦
"Gosh! You see! It's yesterday that he gambled and lost but not the day before yesterday."

b.* Guá **leh[1]** sī tsa-hng lí **leh[2]** I puàh su kiáu,
I LEH FOC yesterday you LEH he fall lose gamble
我 咧 是 昨昏 你 咧 伊 跋 輸 筊
m̄-sī tsa̍h--ji̍t --lah!
not-be the.day.before.yesterday PRT

毋是 昨日 啦

The sentence in (23) demonstrates that a focused element has to follow *leh*^{2} (咧), and *leh*^{1} (咧), which itself must precede *leh*^{2} (咧).

In addition to focus, *leh*^{2} (咧) cannot follow an aboutness topic, either. See (24):

(24) *leh*^{2} (咧) > aboutness topic

a. Guá	**leh^{1}**	lí	**leh^{2}**,	hî	--ah,	i	kan-tann	beh	tsia̍h
I	LEH	you	LEH	fish	PRT	he	only	want	eat
我	咧	你	咧	魚	啊	伊	干焦	欲	食
bah-tsit-á			--lah!	Si̍t-tsāi	ū-kàu		pháinn-khuán.		(TSM)
Japanese.butterfish			PRT	really	sufficiently		bad.behavior		
肉鯽仔			啦	實在	有夠		歹款		

"Gosh! You see! Fish, he only eats Japanese butterfish! This is too much!"

b.* Guá	**leh^{1}**,	hî	--ah,	lí	**leh^{2}**,	i	kan-tann	beh	tsia̍h
I	LEH	fish	PRT	you	LEH	he	only	want	eat
我	咧	魚	啊	你	咧	伊	干焦	欲	食
bah-tsit-á			--lah!	Si̍t-tsāi	ū-kàu		pháinn-khuán.		(TSM)
Japanese.butterfish			PRT	really	sufficiently		bad.behavior		
肉鯽仔			啦	實在	有夠		歹款		

The phrase *hî --ah* (魚啊) "fish PRT" is an aboutness topic phrase. The contrast indicates that even an aboutness topic, the highest among topic phrases, follows *leh*^{2} (咧).

All in all, *leh*^{1} (咧) and *leh*^{2} (咧) are primarily positioned so that no other element can precede them.

So far, we have obtained relative positions between some adverbials in the left periphery and the elements in question, including *leh*^{1} (咧), *leh*^{2} (咧), and *leh*^{3} (咧). The sequence is shown as follows:

(25) *leh*^{1} (咧) > *leh*^{2} (咧) > Aboutness.topic > Speech-act > *leh*^{3} (咧) > Evaluative > Epistemic > Subject-oriented >Manner

3.3.3 A temporary summary

Based on (20), we now have a big picture regarding the distribution of *leh*$^{1\text{-}3}$ (咧). First of all, these elements are all high in the left periphery. Secondly, *leh*^{1} (咧) and *leh*^{2} (咧) are especially high; in fact, they are so high that no other syntactic element can precede them.

The precedence of *leh*^{1} (咧) and *leh*^{2} (咧) is reminiscent of what was observed in Hill's (2007) chapter 2 review of Romanian and West Flemish (Haegeman & Hill 2013 and Haegeman 2014).

Briefly speaking, *leh*^{1} (咧) and *leh*^{2} (咧) might be considered TSM counterparts of vocative realizations in Romanian, Bulgarian, and Umbundu as suggested by Hill (2007). Nonetheless, employing *leh*^{1}(咧) and *leh*^{2} (咧) with first and second person singular pronouns in TSM cannot be vocative, for *leh* (咧) is never a legitimate vocative marker. Compare the examples below:

(26)a. Tsuí-sūn --ah! (TSM)
Tsuisun PRT
水順 啊
"Tsuisun!"

b. Tsuí-sūn --ê!
Tsuisun PRT
水順 的
"Tsuisun!"

c.*Tsuí-sūn leh^{44}!
Tsuisun PRT
水順 咧
(Intended) "Tsuisun!"

d. Tsuí-sūn --leh^{0}?
Tsuisun PRT
水順 咧
"How about Tsuisun?' or 'Where is Tsuisun?"

Unlike *ah* (啊) and *ê* (的), which can be used vocatively as shown in (26)a and b, *leh* (咧) cannot fit this function. When *leh* (咧) is pronounced with a high-level tone as in

(26)c, it is totally ungrammatical. With a neutralized tone, as in (26)d, *leh* (咧) will only give rise to an interrogative construal and produce a fragmented question.

In fact, it is possible to have a vocative follow the *leh*[1] (咧) and *leh*[2] (咧) sequences, as illustrated in the following.

(27) Guá leh lí leh, lí --ah, ná ē-sái tsiah tsū-su --hannh?
I LEH you LEH you PRT how.come allowed so selfish PRT (TSM)
我 咧 你 咧 你 啊 哪 會使 遮 自私 唅
"Gosh! Hey you! How can you be so selfish?"

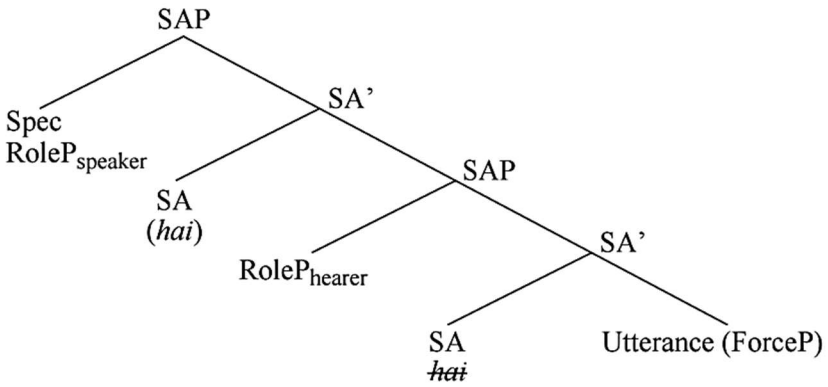
Though the functions of these two elements are not vocative, interestingly, what precedes them rigidly are the first and second person singular pronouns, which are typically found in forms of direct address.

Therefore, the TSM data is evidence that the highest among high projections does not only serve the vocative function. The SA projection, in accordance with Speas & Tenny 2003, is the outermost syntactic piece of interface articulated with pragmatics.

Unlike Speas and Tenny (2003), Haegeman and Hill (2013), in their analysis on discourse particles in Romanian and West Flemish, postulate that the high left peripheral layers are directly related to speech events including establishment of a rapport between a speaker and a hearer in terms of either "attention-seeking" or "bonding." Our data in TSM support their postulation.

To accommodate *leh*[1] (咧) and *leh*[2] (咧), I adopted Haegeman's (2014) SA shell as shown below:

(28)

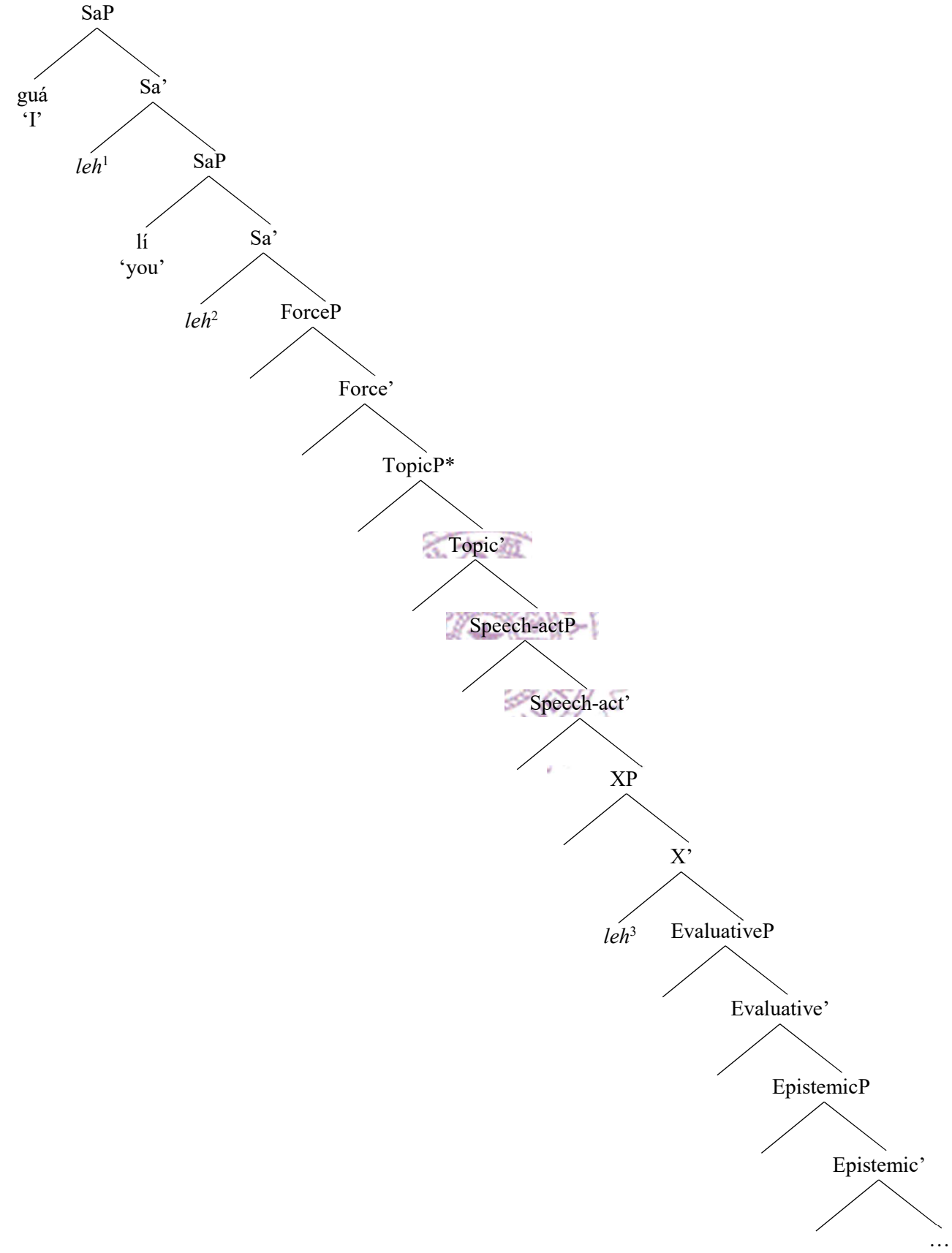


Using this scheme (Speas & Tenny 2013; Hill 2007; Haegeman 2014), I assume that ForceP, in accordance with Rizzi 1997, is selected by an articulated SA projection

headed by the SA heads. This includes a layered articulation, similar to that of transitive verbs, which projects a VP shell. The lower SA head is directly associated with the "hearer." SA poses two arguments: its "direct object", the ForceP complement and its "indirect object", which is the specifier of SA.

The distribution of *leh*[1-3] (咧) is diagramed below. Note that the speech-actP under ForceP should not be confused with the highest SA shell. The former houses the speaker-oriented speech-act adverbials (Cinque 1999), and it functions differently than the latter. Additionally, the initial projection of the utterance, ForceP, is a clausal typing projection in this analysis, and it should be distinguished from those projections that accommodate elements with respect to illocutionary force or speaker attitudes.

(29)


SaP
guá
'I'
Sa'
leh1
SaP
lí
'you'
Sa'
leh2
ForceP
Force'
TopicP*
Topic'
Speech-actP
Speech-act'
XP
X'
leh3
EvaluativeP
Evaluative'
EpistemicP
Epistemic'
…

As shown in (29), the projection accommodating *leh*^{3} (咧) is temporarily labeled as XP due to a lack of understanding its attributes.

In the next section, we will further look into *leh*^{3} (咧) to reach a more satisfactory analysis for it.

3.3.4 More on *leh*^{3} (咧)

One of the reasons why *leh*^{3} (咧) has to be investigated separately is because of its obligatory co-occurrences with other elements.

Unlike *leh*^{1} (咧) and *leh*^{2} (咧), which is accompanied by a pronoun, *leh*^{3} (咧) has to co-occur with a *wh*-element in the sentence. Let us examine the following examples.

(30) a. Tsuí-sūn sī leh^{3} khàu *(án-tsuánn)! (post-verbal *how*; TSM)
Tsuisun be LEH cry how
水順 是 咧 哭 按怎
"What the heck is Tsuisun crying for?"

b. Tsuí-sūn sī leh^{3} khàu *(siánn)! (post-verbal *what*)
Tsuisun be LEH cry what
水順 是 咧 哭 啥
"What the heck is Tsuisun crying for?"

c.* Tsuí-suān án-tsuánn sī leh^{3} khàu! (causal *how*)
Tsuisun how be LEH cry
水順 按怎 是 咧 哭
(Intended) "Why is Tsuisun crying?"

d.* Tsuí-sūn sī leh^{3} án-tsuánn khàu! (manner *how*)
Tsuisun be LEH how cry
水順 是 咧 按怎 哭
(Intended) "How is Tsuisun crying?"

e.* Ū siánn-lâng sī leh^{3} khàu! (pre-verbal *who*)
have who be LEH cry
有 啥人 是 咧 哭
(Intended) "Who the heck is crying?"

f. Tsuí-sūn sī uī-tio̍h siánn leh^{3} khàu? (purposive *why*)

Tuisun be for-ASP what LEH cry
水順 是 為著 啥 咧 哭
"What Tsuisun is crying for?"

First of all, as shown in (30)a and b, it is unacceptable to have *leh*^{3} (咧) without a *wh*-element in the sentence. Secondly, the co-occurring *wh*-element must be nominal as it is shown in (30)c and d.[47] In (30)e, we see that the *wh*-element must not precede *leh*^{3} (咧). Again, we learn from (30)f, in which even without the typical speaker-oriented force, the sentence is grammatical, and the opposite order between the nominal *wh*-element and *leh* (咧) does not give us a *leh*^{3} (咧) sentence. In summary, *leh*^{3} (咧) requires a following nominal *wh*-element.

In addition to the *wh*-element requirements, whenever *leh*^{3} (咧) is present, it must be accompanied by a preceding *sī* (是) "be." Here are examples to illustrate this point.

(31) a. Tsuí-sūn sī leh^3 tshiò án-tsuánn! (TSM)
Tsuisun be LEH laugh how
水順 是 咧 笑 按怎
"What the heck Tsuisun is laughing for?"

b. Tsuí-sūn leh tshiò án-tsuánn?
Tsuisun ASP laugh how
水順 咧 笑 按怎
"What is Tsuisun laughing for?"

c. Tsuí-sūn leh tshiò siánn?
Tsuisun ASP laugh what
水順 咧 笑 啥？
"What is Tsuisun laughing for?"

In the sentences above, the interpretations of (31)b and c do not include the same illocutionary/attitudinal sense of complaining as (31)a does and, therefore, both *leh*s

[47] Note that the post-verbal *how* in (30)a is nominal. It is possible to use *how* as *what* in some specific context in TSM. Below is an instance of this kind.
i) Tsuí-sūn khà tiān-uē lâi, i kám ū kóng án-tsuánn / siánn? (TSM)
Tsuisun knock phone come he Q have say how / what
水順 敲 電話 來 伊 敢 有 講 按怎 / 啥
"Tsuisun called. Did he say anything?"

(咧) in (31)b and c are not *leh*^{3} (咧). As ordinary questions, (31)b and c can be simply analyzed moving the verb "laugh" to the covert light verb, FOR, which gives rise to the causal inquiring meaning (following Lin 2001)[48].

Example (31), therefore, suggests a collaboration between *leh*^{3} (咧) and the preceding *sī* (是) "be." A sentence with *leh*^{3} (咧) should be decomposed further into the illocutionary force from the sequence *sī leh* (是咧) and the following nominal *wh*-element. Under this assumption, the V-*wh* can be put under the same light verb analysis proposed for (31)b and c, which is accompanied by the preverbal sequence that brings forth the speaker's attitude flavor.

So the question is: what are *leh*^{3} (咧) and the preceding *sī* (是)?

If *leh*^{3} (咧) is not a progressive aspect marker (see 3.2.1), then what is it? As an educated guess, I presumptively suggest that it is a grammaticalized *leh* (咧), which denotes the prolonged negative impact from a proposition in the context (cf. the aspectual progressiveness of an event).

Regarding *sī* (是), note that this *sī* (是) when used independently, can be used without *leh* (咧), and can occur hierarchically high to precede evidentials and even speech-act adverbials. Below are some examples[49].

(32) a. Tsuí-sūn sī bîng-bîng leh tsāu lán ê mâ-huân! (TSM)[50]
Tsuisun be evidently ASP return our LK trouble

[48] Unlike post-verbal *what* in MC, both post-verbal *what* and *how* in TSM cannot repeat the verb after *what* and *how*.

i) Nǐ kàn shěme kàn? (MC)
you look what look
你 看 什麼 看？
"Why are you looking at that?"

ii) a.* Lí khuànn siánn khuànn? (TSM)
you look what look
你 看 啥 看
(Intended) "Why are you looking at that?"

b.*Lí khuànn án-tsuánn khuànn?
you look how look
你 看 按怎 看
(Intended) "Why are you looking at that?"

A tentative explanation to this contrast is that TSM does not allow both copies to be realized at PF.

[49] We have a whole following chapter for this element.

[50] The *leh* (咧) in this sentence can only follow the evidential adverbial. From this, we know that it is not *leh*^{3} (咧).

水順　是 明明　咧　找　咱 的　麻煩

"(I suppose we all know that) Evidently Tsuisun keeps giving us a hard time!"

b. Guá　sī　láu-si̍t-kóng　kin-pún　bô　siūnn-beh　lâi.
I　SI　frankly.speaking　simply　NEG　want　come
我　是　老實講　根本　無　想欲　來。

"(I suppose we all know that), to make it frankly, I don't want to come at all."

We have seen that when *sī* (是) co-occurs with *leh*^{3} (咧), it can only follow the speech-act adverbial, and therefore, we should not confuse the two.[51]

Based on the interpretation of the sentence, I suggest that this high *sī* (是) denotes a connotation in which the proposition must be in the common ground; in other words, it marks the semantic content of the speaker's speech act given in the discourse model. Following the definitions and terminology in Creswell 1999, this *sī* (是) is recognized as a dictum focus marker (refer to chapter 4 for a discussion in detail).

Another characteristic of sentences containing *leh*^{3} (咧) is an obligation for an NP to precede the sequence of *sī leh*^{3} (是咧). Moreover, not all NP can fill this slot. The following examples demonstrate these points.

(33) a.*Sī　Tsuí-sūn / i　leh^3　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^3　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　leh^3　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^3　khàu　án-tsuánn!
now / now SI　LEH　cry　how

[51] We will discuss this in chapter 4.

這馬／今　　是　咧　　哭　　按怎

"Why the heck is he crying now?"

e. Sī　　leh^{3}　　háu　　án-tsuánn!

SI　　LEH　　cry　　how

是　　咧　　吼　　按怎

"Why the heck is he crying?"

f. Sī　　leh^{3}　　bô-tāi-bô-tsì　　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-tsì　　sī　　leh^{3}　　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!)"

From (33), it is clearly shown that the NP cannot be left behind *sī* (是) when there is only one NP, regardless of NP's being the grammatical subject. Only when there is no overt NP, the slot preceding *sī* (是) can be left unfilled (like (33)e, probably occupied by a null topic)[52]. Moreover, the grammaticality of both (33)f and g, and the contrast between (33) c and d, indicate that adverbials are not required to be fronted, unlike NP adjuncts where the NP adjunct occurs without the other overt NP.

In addition, grammatical subjects are prioritized to be preposed in contrast to other NPs. By way of example:

(34) a.* E-poo　　sī　　leh^{3}　　Tsuí-sūn　　khàu　　án-tsuánn!　　(TSM)

afternoon　　SI　　LEH　　Tsuisun　　cry　　how

[52] Null topic is observed in V2 languages like German. The same strategy, installing a null topic as the last resort, is also found in Chinese obligatory topicalization (refer to Tsai 2015b). Below are some German examples from Brüening 2002.

i) a.　Ich　　hab'　　ihn　　schon　　gesehen.　　(German)

I　　have　　him　　already　　seen

"I saw him already."

b.　Hab'　　ihn　　schon　　gesehen.

have　　him　　already　　seen

"[I] saw him already."

c.　Hab'　　ich　　schon　　gesehen.

have　　I　　already　　seen

"I saw [him] already."

下晡　是　咧　水順　哭　按怎

(Intended) “This afternoon, why the heck was Tsuisun crying?”

b.? Tsuí-sūn　sī　leh^{3}　e-poo　khàu　án-tsuánn!

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^{3}　khàu　án-tsuánn?

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^{3}　khàu　án-tsuánn?

Tsuisun　afternoon　SI　LEH　cry　how

水順　下晡　是　咧　哭　按怎

“Why the heck was Tsuisun crying this afternoon?”

When the grammatical subject is overt, as in (34)a, preposing the nominal temporal adjunct does not salvage the sentence. On the other hand, nominal adjuncts can be optionally preposed when the grammatical subject precedes the *sī leh*^{3} (是咧) sequence, as is shown in (34)c and d.

Regarding the obligatory NP preposing, I suggest accounting for it in the spirit of Rizzi’s (2004) criterial positions who suggests adding a peripheral feature under TopP, which requires the most prominently specific element to fill its specifier position.

As for the indispensable *wh*-element, which occurs hierarchically lower, it is proposed that an operator binds this element from the specifier of the projection that accommodates *sī* (是). Since *sī* (是) and *leh*^{3} (咧) are interdependent, I assume they are in an Agree relationship. Above all, an attitudinal head is responsible for the illocutionary force that derives the speaker-oriented attitudinal reading (refer to Huang & Ochi 2004; Chou 2012; Paul 2014; Paul 2015; Pan 2015; Pan & Paul 2016). A multiple Agree relationship in the spirit of Hiraiwa 2001 further strings together the operators, *sī* (是) and *leh*^{3} (咧).

Below is an example repeating (30)a, which demonstrates the detailed analysis of *leh*^{3} (咧).

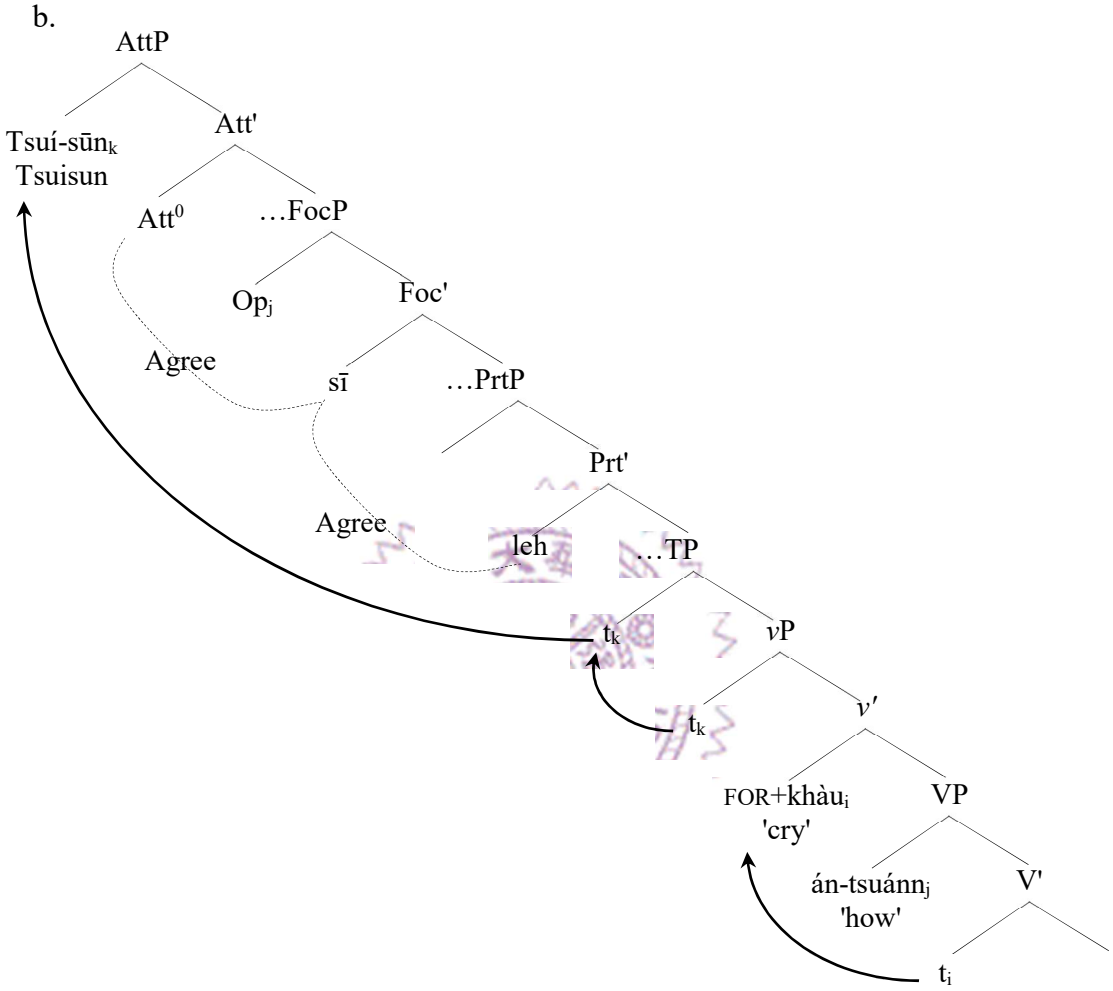
(35) a. Tsuí-sūn sī leh^{3} khàu án-tsuánn! (TSM)

Tsuisun SI LEH cry how

水順 是 咧 哭 按怎

"Why the heck is Tsuisun crying?"

b.



In the lower part of (35)b, we see the verb is externally merged with a covert light verb, FOR, to derive the basic causal meaning. The *án-tsuánn* (按怎) 'how' is bound by an operator at Spec.FocP, which is in a Spec-Head agreement with *sī* (是). The head of FocP, *sī* (是), then works as the Probe in Agree with *leh*^{3} (咧) as its goal. This Agree explains the collaboration between these two elements, a dictum focus marker and the discourse persistency marker. Moreover, both the Foc^0, *sī* (是) and *leh*^{3} (咧) serve as the Goals Agreed with AttP^0 as the Probe (Hiraiwa 2001); this Agree derives the illocutionary force from the speaker.

Under the VP-internal Subject Hypothesis, the subject is internally merged under Spec.*v*P 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[53].

3.3.5 The priority of *leh*[1] (咧) and the nature of SA shell

So far, we have pinpointed the three *leh*s (咧) in question and provided a syntactic analysis; there is still one thing left unaccounted for: the priority of *leh*[1] (咧) illustrated in (3)c-e and repeated below in (36).

(36) a.* Lí **leh[1]** guá **leh[2]** kin-á-jit sī **leh[3]** bô-tāi-bô-tsì **leh[4]** lo̍h siánn-mih hōo!
you LEH I LEH today be LEH without.a.reason LEH fall what rain
你 **咧[1]** 我 **咧[2]** 今仔日 是 **咧[3]** 無代無誌 **咧[4]** 落 啥乜 雨

b.* Lí **leh[2]** kin-á-jit sī **leh[3]** bô-tāi-bô-tsì **leh[4]** lo̍h siánn-mih hōo!
you LEH today be LEH without.a.reason LEH fall what rain
你 **咧[2]** 今仔日 是 **咧[3]** 無代無誌 **咧[4]** 落 啥乜 雨

c. Guá **leh[1]** kin-á-jit sī **leh[3]** bô-tāi-bô-tsì **leh[4]** lo̍h siánn-mih hōo!
I LEH today be LEH without.a.reason LEH fall what rain
我 **咧[1]** 今仔日 是 **咧[3]** 無代無誌 **咧[4]** 落 啥乜 雨

[53] It is possible to have an adverbial inserted between *sī* (是) and *leh* (咧) and, consequently, it is inappropriate to analyze these two as a complex head. See (i):

i) Tsuí-sūn sī bô-tāi-bô-tsì leh khàu án-tsuánn! (TSM)
Tsuisun SI without.a reason LEH cry how
水順 是 無代無誌 咧 哭 按怎
"Why the heck is Tsuisun crying without an apparent reason?"

I temporarily assume that the flanked adverbial is preposed due to some sort of topicalization.

Recall that the ungrammaticality of the sentence in (36)c indicates the fixed order of the pronouns preceding *leh*[1] (咧) and *leh*[2] (咧) (1st.SG.pronoun *leh*[1] > 2nd.SG.pronoun *leh*[2]). Further, *leh*[2] (咧) cannot occur without *leh*[1] (咧), but not vice versa, as is shown in (36)b and c. In other words, *leh*[1] (咧) has priority over *leh*[2] (咧) in both precedence and occurrence.

The priority found in the SA shell is reminiscent of the direct object's priority over the indirect object in English ditransitive verbs. For example, as observed in Jespersen (1927), a ditransitive verb, e.g. *offer*, can be used with the direct object alone (e.g. *they offered a reward*), but not with only the indirect object (e.g. **they offered the man*).

If we assume the "double object construction" has a structure of VP-shell as suggested by Larson (1988), then even SA shell and ditransitive verb construction are structurally analogous to each other. In this sense, the first person singular pronoun preceding *leh*[1] (咧) enjoys the privilege just like the direct object in a double object construction.

In addition, empirically, the speaker enjoys a more conspicuous status than the addressee. Giorgi's (2008; 2009b; 2010; 2012) observations of Italian identify a syntactic position privileges the speaker, but no research so far, to my knowledge, suggests a position exclusively for the addressee.

On the other hand, the Cartographic Approach implies the higher the syntactic position is, the higher the extent of subjectivity will be. Here, the proposition's influence is more subjective toward the speaker than toward the addressee.

After all, the speaker is the sentence's instigator. A sentence can be uttered in a monologue, however there is no listener without a speaker.

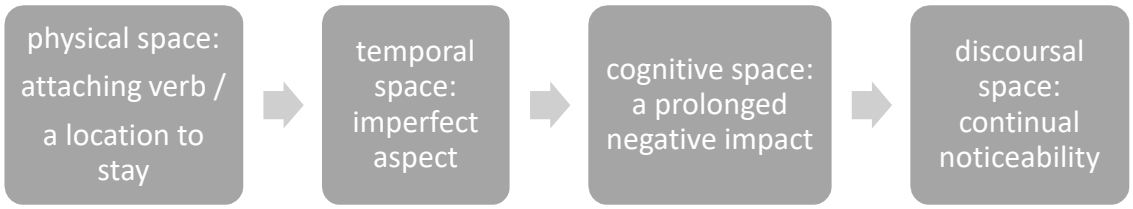
3.3.6 Summary

In this section, we examined the occurrences of *leh*[1-3] (咧) and located their syntactic positions respectively. Based on the hierarchically outermost distribution of *leh*[1] (咧) and *leh*[2] (咧), we recognized them as realizations of SA shell, which was proposed by Speas and Tenny (2003) and observed in Romanian, Bulgarian, Umbundu, and West Flemish (Hill 2007; Haegeman & Hill 2013; Haegeman 2014). Unlike their

linguistic counterparts, *leh*[1] (咧) and *leh*[2] (咧) function clearly as SA elements instead of as vocative markers, and they also serve as evidence for the empirically rigid order between speaker and addressee in the shell. TSM, the object language, is therefore, a real Speas-Tennian language.

Furthermore, the three *leh*-s (咧), which are homonymous of the aspect marker *leh* (咧), illustrate a spectrum of grammaticalization. From an imperfect aspectual marker, *leh* (咧) has further developed into several different function words. If etymologically, *leh* (咧) was a word denoting location as suggested by Lien (2015a), then its grammaticalization process would be considered to be along the lines of the space abstraction, which gave birth to several homonyms distributed on a wide spectrum spanning from *v*P, TP, to CP (See (37)).

(37) The grammaticalization of *leh* (咧)



The versatility of *leh* (咧) is not peculiar at all, for synchronically, we have the Greek imperfective aspect used for habitual and generic statements, as well as used to denote progressive and ongoing events (Giannakidou 2009). Diachronically, both *yǐ* (矣) in Old Chinese and *le* (了) in MC have extended their functions to include relationships on conceptual levels rather than tense-aspects (see chapter 11 in Mei 2015). Another example of grammaticalization in Old Chinese is *jiāng* (將), which was originally a modal and later transferred into an aspect and then a mood element (*ibid*). That is to say, the grammaticalization and multi-functions of *leh* (咧) provides us another instance of the development of mood elements and pragmatic markers from grammaticalizing elements in TP, an example of a relatively long route of grammaticalization.

3.4 The semantics of non-aspect *leh*s (咧)

In this section, I will delineate the denotations of *leh*[1-3] (咧). We will try to tease out their functions and natures before formalizing them by using Potts 2005, because the contributions of *leh*[1-3] (咧) meet the properties of conventional implicatures defined by Potts.

3.4.1 The functions and the not-at-issue nature of *leh*[1-3] (咧)

With respect to their denotations, the sequence *sī leh*[3] (是咧) denotes a sense of emphasis, emphasizing on the prolonging negative impact of the proposition content. As for *leh*[1] (咧) and *leh*[2] (咧), which are preceded by a first person and a second person singular pronoun respectively, they work like attention attractors. Speakers use *leh*[1] (咧) and *leh*[2] (咧) to convey information such as "this is quite noteworthy to me" and "this is noteworthy to you."

The crude senses can be further abstracted based on the homonymity and presumably shared origin of *leh*s (咧). Recall that Smith (1994) suggests that MC *zài* (在), when marking the internal structure of an event, presents no initial and final point of a situation, and it only makes the internal part of the situation visible. Assume *leh*[4] (咧) has been grammaticalized and semantically bleached, and consequently derived into *leh*[3] (咧), *leh*[2] (咧), and *leh*[1] (咧). The event-internal durativity of *leh*[4] (咧) was then transformed into the context-internal impact prolonging marking, and furthermore, the knowledge-wise persistent saliency regarding the addressee and the speaker (from the speaker's viewpoint).

In sum, the denotations of *leh*[3] (咧) and *leh*[1, 2] (咧) can be summarized as follows[54].

---

[54] Attentive readers may have a question about the differences between high applicatives (see (i); refer to Tsai & Yang 2008; Tsai 2017) and *leh*[1] (咧).

(i) Tā jūrán gěi wǒ ná-le qián jiù pǎo. (MC)
he unexpectedly AFF me take-ASP money then run
他 居然 給 我 拿了 錢 就 跑
"Unexpectedly, he took the money and ran away on me."

There are at least two differences between these two. Firstly, *leh*[1] (咧) is higher than the high applicative as shown in (ii). Secondly, only *leh*[1] (咧) can be used in a positive sense as demonstrated in (iii).

(ii) Guá leh i suah kā guá tsînn thèh --leh tō tsáu. (TSM)
I LEH he unexpectedly AFF me money take ASP then run

(38) *leh*[3] (咧) denotes that the impact from the proposition is negative and prolonged in the context.

(39) *leh*[1, 2] (咧) denotes that the proposition is continually noteworthy with respect to the speaker/addressee.

It is noteworthy that these *leh*s (咧) do not contribute directly to the proposition, i.e. the at-issue content. In other words, what they denote belongs to not-at-issue content. In the literature, there are tests for distinguishing the not-at-issue from the at-issue content. I will implement two tests in the following examples to show the not-at-issue nature of their contributions.

The examples below execute the test of speaker commitment.

(40) #	Tsa-hng	Tsuí-sūn	sī	leh[3]	puàh-tó	án-tsuánn!	M̄-koh	i	
	yesterday	Tsuisun	SI	LEH	fall	how	but	he	
	昨昏	水順	是	咧[3]	跋倒	按怎	毋過	伊	
	puàh-tó	to	iā	bô	siánn.				(TSM)
	fall	PRT	EMP	NEG	what				
	跋倒	都	也	無	啥				

"#What the heck Tsuisun fell yesterday! But his falling is not a big deal."

(41) #	Guá	leh[1]	lí	leh[2]	Tsuí-sūn	tsa-hng	puàh-puàh--tó!	M̄-koh	
	I	LEH	you	LEH	Tsuisun	yesterday	fall	but	
	我	咧[1]	你	咧[2]	水順	昨昏	跋跋倒	毋過	
	i	puàh-tó	lán	mā	bô	tsha.			(TSM)
	he	fall	we	EMP	NEG	difference			
	伊	跋倒	咱	嘛	無	差。			

"#Gosh! You see! Tsuisun fell yesterday! But, his falling has nothing to do

---

我 咧 伊煞 共我 錢 提 咧 就 走
"Gosh! Unexpectedly he took the money and ran away on me."

(iii) a. Guá leh hōo tsóng-sǹg thîng --ah. (TSM)
I LEH rain finally stop ASP
我 咧 雨 總算 停 矣
"Gosh! The rain stopped finally. (And this is a good thing.)"

b. Yǔ jìngrán gěi wǒ tíng le. (MC)
rain unexpectedly AFF me stop ASP
雨 竟然 給 我 停 了
"Unexpectedly, the rain stopped. (And this is not what I want)."

with us."

Both (40) and (41) are infelicitous, for the following sentences go against the speaker's commitment in the first one.

The second test is the projection test (Karttunen 1973; Lyons 1977). In regards to scope taking, TSM sentences are generally isomorphic, and, therefore, no high *leh* (咧) can be embedded under negation, just as both TSM negative words, neither *bô* (無) nor *m̄* (毋), can precede them (see (42)). In addition to negation, we can also carry out the test with time references, as shown in (43) for *leh*^{3} (咧).

(42) a. (*Bô) guá leh^1 (*bô) lí leh^2 Tsuí-sūn (*bô) sī (*bô) leh^3
NEG I LEH NEG you LEH Tsuisun NEG SI NEG LEH
無 我 咧 無 你 咧 水順 無 是 無 咧
puàh-tó án-tsuánn! (TSM)
fall how
跋倒 按怎

b. (*M̄) guá leh^1 (*m̄) lí leh^2 Tsuí-sūn (*m̄) sī (*m̄) leh^3
NEG I LEH NEG you LEH Tsuisun NEG SI NEG LEH
毋 我 咧 毋 你 咧 水順 毋 是 毋 咧
puàh-tó án-tsuánn!
fall how
跋倒 按怎

(43) Tsa-hng --ah, lín Tsuí-sūn sī leh^3 puàh-tó án-tsuánn! (TSM)
yesterday PRT your Tsuisun be LEH fall how
昨昏 啊， 恁 水順 是 咧 跋倒 按怎

"What the heck your husband Tsuisun fell for yesterday!"

Even though the temporal adverbial *tsa-hng* (昨昏) 'yesterday' occurs in the very beginning of the sentence, it can only scope over the proposition, 'Tsuisun fell,' but not over the contribution from *leh*^{3} (咧). The prolonged negative tangible/intangible contextual effects of this event are still around and not gone with yesterday.

Based on the results from these tests, I suggest the nature of the contributions from *leh*[1-3] (咧) are conventional implicatures (CIs). The properties of CIs, according to Potts (2005:11 (2.10)), are as follows:

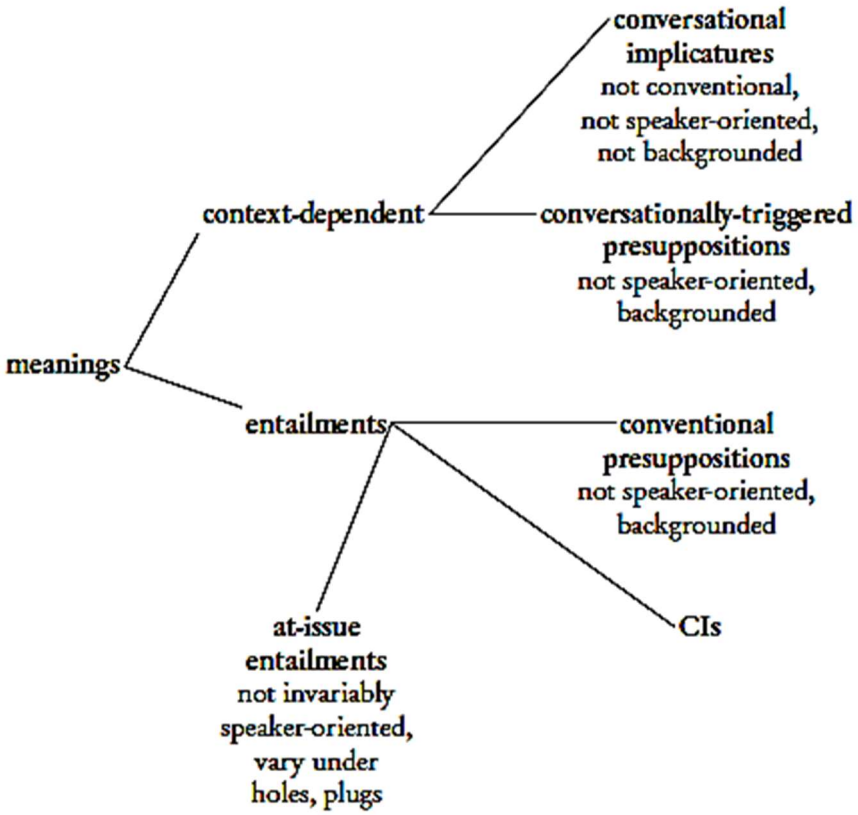
(44) a. CIs are part of the conventional meaning of words.
b. CIs are commitments, and thus give rise to entailments.
c. These commitments are made by *the speaker of the utterance* "by virtue of the meaning of" the words he chooses.
d. CIs are logically and compositionally independent of what is "*said* (in the favored sense)", i.e., independent of the at-issue entailments.

We have already seen that the contributions of *leh*[1-3] (咧) result from the usages of these words. The tests above confirm that the contents are commitments made by the speaker. Moreover, these contents are independent of the at-issue entailments.

Further, we can be sure that the contents contributed to by *leh*[1-3] (咧) are not conversational implicatures, for they cannot be cancelled based on the result of the tests in (40) and (41). Moreover, they cannot be presuppositions for they are speaker-oriented and not backgrounded.

Potts provides a neat summary of these terms in the following.

(45) Potts 2005:23 Figure 2.1



Based on what we've found, we can turn to the denotation of *leh*[1-3] (咧) based on Potts' (2005) framework.

3.4.2 The denotations of *leh*[1] (咧) and *leh*[2] (咧)

In Potts' (2005) framework of the CI application, *leh*[1-3] (咧) are expressives. Following Potts' parsetree interpretation (2005: 99 (4.18)) in (46), we are then able to compute the sentences with expressives compositionally. The result is a pair of sets of worlds, including the set of all worlds in which the at-issue proposition is true and the set of worlds in which the speaker's expressives are true.

(46) Parsetree interpretation

Let $\mathcal{T}$ be a semantic parsetree with the at-issue term a: σ^a on its root node, and distinct terms $\beta_1 : \langle s^a, t^c \rangle, \ldots, \beta_n : \langle s^a, t^c \rangle$ on nodes in it (extensionally, $\beta_1 : t^c, \ldots, \beta_n : t^c \rangle$. Then the interpretation of $\mathcal{T}$ is the tuple

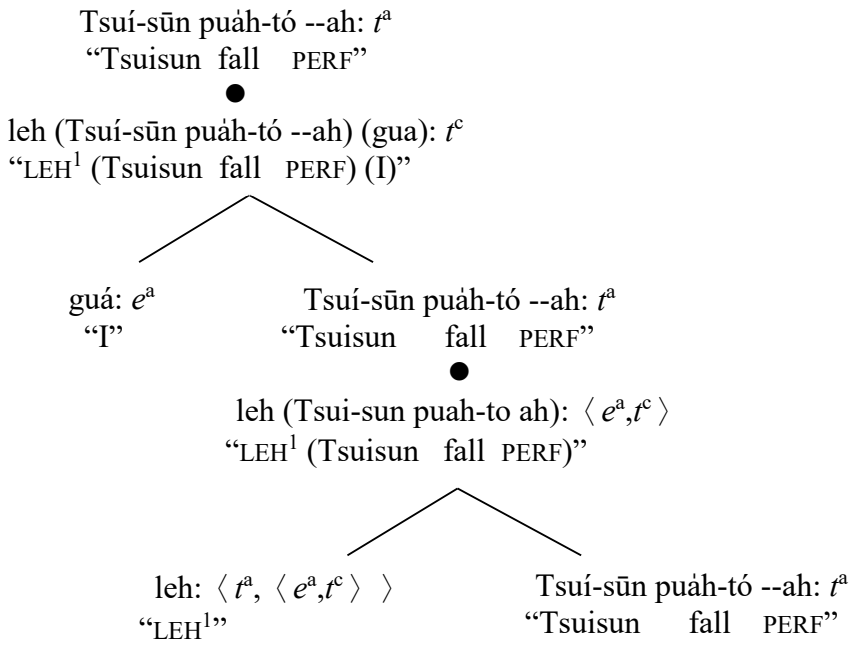
$\langle [\![\alpha : \sigma^a]\!]^{\mathcal{M}_i, g}, \{ [\![\beta_1 : \langle s^a, t^c \rangle]\!]^{\mathcal{M}_i, g}, \ldots, [\![\beta_n : \langle s^a, t^c \rangle]\!]^{\mathcal{M}_i, g} \} \rangle$

where $[\![.]\!]^{\mathcal{M}_i, g}$ is the interpretation function, taking formulae of the meaning language to the interpreted structure $\mathcal{M}_i$, relative to a variable assignment g.

Below is an example that contains *leh*[1] (咧).

(47) a. Guá leh[1] Tsuí-sūn puàh-tó --ah. (TSM)
I LEH Tsuisun fall ASP
我 咧 水順 跋倒 矣
"Gosh! Tsuisun fell!"

b. Parsetree structure



In (47)b, the first person singular pronoun, as a variable, is assigned with the value of the speaker by the assignment function *g* under parsetree interpretation. The parsetree interpretation determines that (47)a denotes a pair of sets of worlds: the set of all worlds in which Tsuisun has fallen, and the set of worlds in which the speaker considers the proposition is continuatively noteworthy with respect to the speaker's position.

On the other hand, *leh*[2] (咧) only differs in being assigned with a value of the addressee by the assignment function *g*.

3.4.3 The denotation of *leh*[3] (咧)

Remember that *leh*[3] (咧), unlike *leh*[1] (咧) and *leh*[2] (咧), does not function alone. When *leh*[3] (咧) is found in a sentence, it always collaborates with a preceding *sī* (是) 'be' and a lower *wh*-element. That is to say, we have to consider all three components to obtain the right interpretation of the sentence.

Based on the connotation of the sentences embedding the *sī leh* (是咧) sequence, I propose that this *sī* (是) marks the semantic content of the speaker's speech act as given within the discourse model (see chapter 4 for more examples and the argumentation). In Creswell's (1999) term, this *sī* (是) is a dictum focus marker.

In Cresswell's words, 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.

With the dictum focus marker Agreed with its binder at the specifier of FocP, the bound *wh*-element can be considered an instantiated event argument that forms a complex head with a light verb.

One thing that cannot be ignored is that the sentence enclosing the *sī leh* (是咧) sequence, though not used as information seeking questions, forms content questions. In fact, they meet the functions of rhetorical questions outlined by Bhatt (1998):

(48) a. Rhetorical questions do not solicit an answer.
b. Rhetorical questions assert that the extension of the question denotation is empty.

Indeed, those sentences with the sequence are not uttered to seek an answer; and what is more, the speaker does use these kinds of sentences to convey that he does not believe there is an answer to it, for the whole thing is simply unreasonable and should not happen to begin with.

Based on this line of reasoning, and following Han's (2002) scheme for rhetorical questions, I propose that the operator at Spec.FocP binding the event argument overtly realized by the *wh*-element is a negative quantifier.

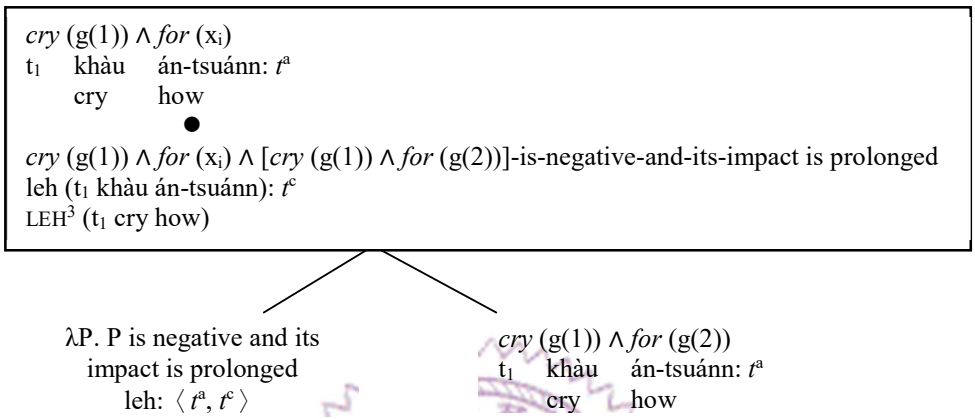
According to Han, the LF output of an English rhetorical *wh*-question intersects with the pragmatics and undergoes a post-LF derivation where the *wh*-phrase maps onto a negative quantifier, which takes scope over the entire sentence (2002: 220).

Unlike the English *wh*-phrases that move, TSM *wh*-phrases stay in-situ. Following Tsai's (1994, 1999) proposal that in-situ, *wh*-nominals are licensed through unselective binding, hence the operator that binds the *wh*-element in a *sī leh* (是咧) construction is suggested to be a negative quantifier.

The composition of the construction in question is exemplified below.

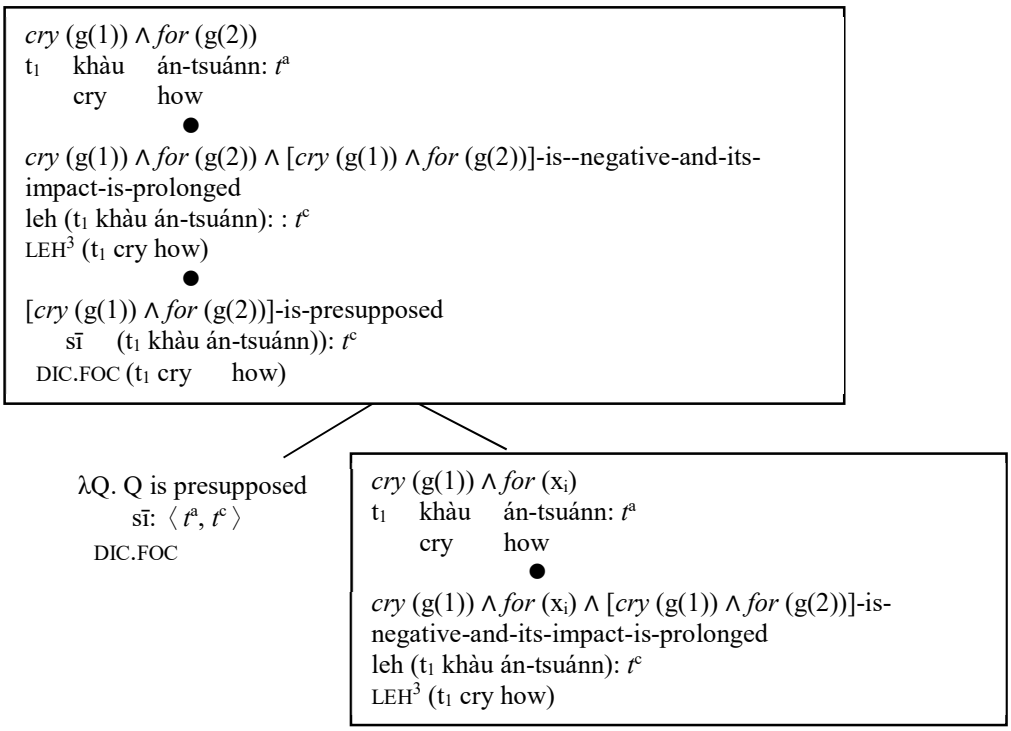
(49) a. Tsuí-sūn sī leh^{3} khàu án-tsuánn! (TSM)
Tsuisun SI LEH cry how
水順 是 咧^{3} 哭 按怎
"Why the heck is Tsuisun crying?"

b-1.



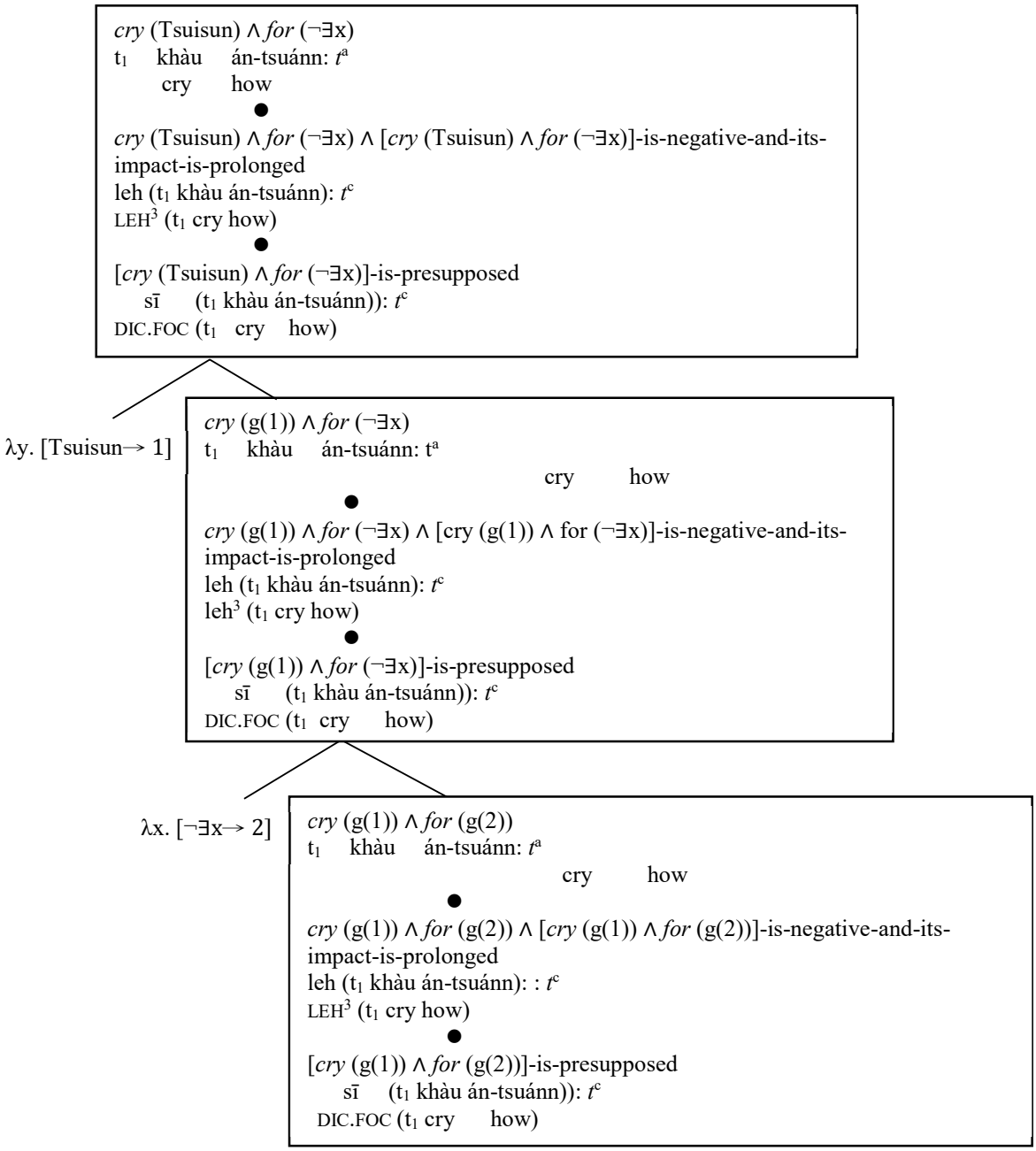
From bottom up, we begin with the sentence "t1 is crying because of something." The subject and the cause are temporally filled by assignment function g, which applies to 1 and 2. Additionally, *leh*^{3} (咧), which is a function taking an at-issue truth value as its argument then applies to the aforementioned sentence. By doing so, we now have two layers that correspond to at-issue and not-at-issue content respectively, as shown in the square in (49)b-1.

b-2.



In (49)b-2, the result of (49)b-1 is fed into the function of *sī* (是), and the output becomes the lowest level below what we already have. And now we have an at-issue content with two layers of not-at-issue content contributed by *leh* (咧) and *sī* (是) respectively.

b-3.



Lastly, in (49)b-3, we identify the subject and the cause via predicate abstraction, as shown above.

With the input from the dictum focus *sī* (是) and *teh*^{3} (咧), the proposition "Tsuisun is crying" is accompanied with two additional connotations: first, it is supposed that there is a cause for Tsuisun's crying, and second, that negative impact from Tsuisun's crying and what caused the event are unpleasantly lingering on in the discourse.

3.5 Summary

In this chapter, we have investigated the three *leh*-s (咧) that share the same origin but have evolved into different elements via the grammaticalization process. We pinpoint their hierarchical positions in syntax and explicate their denotation in the schemata of Potts 2005 and Han 2002.

These elements not only illustrate the development of function words in this language, but also show how far this process can reach. As we learned from *leh*^{1} (咧) and *leh*^{2} (咧), in a discourse-oriented language such as TSM, the grammaticalization has led to the birth of pragmatic markers, which are at the boundary of syntax–pragmatics.

Regarding these elements, it is noteworthy that they are the embodiment of the SA shell proposed by Speas & Tenny (2003). Unlike those elements suggested to be situated under this shell construction, *leh*^{1} (咧) and *leh*^{2} (咧) are not vocative markers. They are truly perspective vehicles of the speaker and the addressee, and therefore fulfill the spirit of the construction. In this sense, TSM, so far as I know, is the only language that is truly Speas-Tennian, among the languages that employs overt elements to bridge syntax and pragmatics.

CHAPTER 4 THE REALIZATION OF DICTUM AND COMMENTING-VERUM FOCUS MARKERS

This chapter is devoted to two kinds of usages of *sī* (是), which are not mentioned in the literature.

By demonstrating its distribution patterns, which separate it from other known occurrences of its cognate in MC, I will argue this element has evolved into different discourse markers in TSM; one is a dictum focus marker (Creswell 1999), and the other is a commenting–verum focus marker, which emphasizes the truth of the not-at-issue content, expressed by speaker-oriented adverbs in our examples, based on the two-dimensional semantics (Potts 2005).

Unlike languages in the Mainland Southeast Asia linguistic area, which are highly analytic, an English inflected verb, auxiliary or lexical, carries a combination of different information. As a result, what kind of focus is involved, and what is focused on, cannot be distinguished easily. The following examples are from Creswell (1999 fn.7).

(1) Fred WAS a chef, but NOW he's been demoted to chef assistant.
(2) Bobby could've eaten the cookies, and Jan might have eaten the cookies. But Alice DID eat the cookies. Her fingerprints are all over the jar.

According to Creswell, in (1), the tense of the verb is in focus; in (2) on the other hand, the focus is the "degree of truth."

Sometimes, it becomes difficult to tell what the focused ingredient is. Creswell 1999 (24) gives an example of this kind:

(3) B.5 Well, how do you use your credit card? I mean, do you just keep it in reserve?
A.6 Well, the way I'd like to try and use it is, you make your purchases at prime buying time.
B.7 Uh-huh.
A.8 Uh-huh--and then you pay that off and don't use it until it's paid off.
B.9 Uh-huh
A.10 Uh-huh. That's, that's my ideal way
B.11 Uh-huh. **How DO you use it?**
A.12 Emergencies come along, and I use it.

Note the question in bold; it is hard to say whether it involves verum focus (emphasizing the truth of the proposition), dictum focus (signaling the presupposed quality of the propositional content), or some other kind of focus. As pointed out by Creswell (1999), the set of contexts where verum focus is appropriate is a subset of the contexts where dictum focus is appropriate[55].

From a typological point of view, Chinese has been considered a robust, analytic language, where in-situ construals are more or less the norm for encoding "the height of interpretation." In this chapter, I would like to show that TSM, a relatively conservative member of the Mainland Southeast Asia linguistic area family, assigns two additional explicit positions for two different kinds of focus interpretations.

The chapter is arranged as follows. A brief review is given in 4.1. In 4.2, I will demonstrate with data that some other elements can intervene between *sī* (是) and VP in a TSM *wh*-question, contrary to its MC counterpart. We will pin down the position of this *sī* (是) and identify it. More data, especially the relative positions between *sī* (是) and some high adverbs, are provided in 4.3 to illustrate that there is a different *sī* (是) in addition to the aforementioned one. Due to their similarity, I give some contextual examples, in which the usage of *sī* (是) is ambiguous and, in some contexts, where the two can be well differentiated in 4.4. This section also contains a short note for dialectal variances, which account for a special usage of *shì* (是) among some MC speakers. Further, 4.5 is devoted to the denotations of the two markers and composition of a sentence that accommodates them. In 4.6, I introduce the predicate-focus and compare it with the commenting–verum focus (CVF). This chapter is summarized in 4.7.

4.1 Previous studies

Unlike the scarcity of attentions drawn to *sī* (是) in TSM, numerous studies have been devoted to its cognate *shì* (是) in MC. This section does not intend to review them in detail since none of them are relevant to the data and phenomenon in question. Hence, only the key findings of some of the previous research will be discussed briefly in this section.

[55] I follow Creswell (1999) on the definitions of verum and dictum focus throughout this chapter.

Shì (是) in MC is described in many different ways, according to its various usages respectively. It has been suggested as a copula (e.g., Wang 1937; Chao 1968; Tang 1979), an identifying verb (Li 1925; cf. Wang 1954; Hsu 1973), a demonstrative (Gao 1970), a discerning verb denoting affirmation and emphasis (Tang 1979), a transitive verb (Chao 1968), or a nominalizing specifier in the '*shì...de*' (是…的) construction (Chao 1968 and Li and Thompson 1981). Some claim that it produces contrastive stress or an assertive reading (Chao 1968; Lee 2005), or that it signals special affirmation (Li and Thompson 1981). *Shì* (是) is also entertained to be either transitive or intransitive (Huang 1988). Based on its distribution in a sentence, it is also claimed to be either a focus head or an IP adjunct (Lee 2005). A radical proposal is found in studies like Cheng 2008, in which all its usages are argued to involve nothing but a copula.

Stemming from the claim that in MC, predicate structure directly determines the topic–comment structure of a clause, von Prince (2012) develops formal definitions of the copula and the so-called comment marker *shì* (是). He distinguishes being contrastive from being the comment of an utterance and suggests these two belong to two independent categories, and they should not be collapsed into the notion of *focus*. Even though the semantic definition of the copula *shì* (是) is quite close to the meaning of the comment marker *shì* (是), von Prince (2012) insists that they are two different lexemes. According to von Prince, the function of the comment marker *shì* (是) is to interfere with the default predicate structure of a clause and to imply that the comment is contrastive. Syntactically, von Prince (2012) suggests that comment marking *shì* (是) is an adjunct to the constituent, which it takes as its first argument.

As noted by von Prince (2012), most of the previous studies that treat MC *shì* (是) as a focus marker identify the information-structural particle *shì* (是) with the copula *shì* (是); however, none of the studies have provided a definition that covers both uses. Here I would like to point out that an all-copula analysis is not viable. And this can be demonstrated by considering the occurrence of *shì* / *sī* (是) with different kinds of predicates. Compare the relative positions between *sī* (是) and the adverb *ū-iánn* (有影) "really" in the following.

(4) a. Guá ū-iánn **sī** ha̍k-sing. (TSM)

I really be student
我 有影 是 學生
"I am really a student."

b. Guá **sī** ū-iánn **sī** hȧk-sing --ah, (m̄-koh i bô-ài sìn.)
I be really be student. PRT but he not-want believe
我 是 有影 是 學生 啊 毋過 伊 無愛 信
"It is true that I am a student? (But he doesn't believe it).'

(5) a. Hong-thai **sī** ū-iánn lâi --ah. (TSM)
typhoon be really come ASP
風颱 是 有影 來 矣
"It is true that the typhoon has arrived."

b. Hong-thai ū-iánn **sī** lâi --ah.
typhoon really be come ASP
風颱 有影 是 來 矣
"The typhoon has really arrived."

c.* Hong-thai **sī** ū-iánn **sī** lâi --ah.
typhoon be really be come ASP
風颱 是 有影 是 來 矣
(Intended) "It is true that the typhoon has indeed arrived."

As shown by the contrast between (4)b and (5)c, a clause's repetition of *sī* (是) is more restricted when the predicate is not nominal. This is not conceivable if we acknowledge that all *shì*-s / *sī*-s (是) share the same syntactic status and function.

The fact that there are different kinds of *shì*-s / *sī*-s (是) can also be illustrated in another way. Consider the following sentences in which, again, we have *shì* / *sī* (是) iterated.

(6) a. Tsuí-sūn **sī** ū-iánn **sī** Gîn-khuân ê hȧk-sing (bô-m̄-tio̍h).(TSM)
Tsuisun be really be Gin-khuan LK student (not-wrong)
水順 是 有影 是 銀環 的 學生 無毋著
"It is true that Tsuisun is a student of Gin-khuan."

b.* **Sī** Tsuí-sūn **sī** tsa-hng khì Tâi-pak.
be Tsuisun be yesterday go Taipei

是　　水順　是 昨昏　　去　台北

(Intended) “It is Tsuisun who went to Taipei yesterday, and it is yesterday but not any other day.”

Compare (6)a with (6)b; it is obvious that double occurrences of *sī* (是) are conditioned by its positions (and the corresponding functions, presumably). If all *sī*-s (是) are copulas that are identical to each other wherever they are distributed in a sentence, the contrast between the examples above would be mysterious.

Now let us turn to one of the usages of *sī* (是) which, to my knowledge, has not been mentioned in the previous studies.

4.2 Another kind of *be*

In this section, I will illustrate a different usage of *sī* (是) “be” in TSM. I will show that this high occurrence of *sī* (是) is a dictum focus marker (*à la* Creswell 1999), which marks the denotation of its clause as old and signals the presupposed quality of the propositional content of the speech act.

4.2.1 Data

It has long been observed that the presence of *shì* (是) in MC will cause the intervention effect in a question formed with a *wh*-adverbial (Cheng and Rooryck 2002, Soh 2005, Tsai 2008, and Yang 2008; see (7)a), yet Yang (2008:9-10) shows that *wh*-nominals are not totally immune from the intervention effect, as illustrated in (7)b ((7)a and (7)b are reproduced from Yang 2008:9 (17a) and (16a) respectively). [56]

(7) a.*Shì　Zhāngsān　wèishénme / zěnme　cízhí?　(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-ASP　what
是　張三　吃了　什麼

(Intended) “What was x such that it was Zhangsan who ate x?”

[56] The co-occurrence of *zěnme* (怎麼) and *shì* (是) is only possible when *zěnme* (怎麼) is a manner-*how*. See Lee 2005:92 (67a).

Interestingly, when *shì* (是) occurs in a lower position, for example, adjoined to *v*P, only the weak intervention effect is observed. See (8):

(8) ? Zhāngsān shì chī-le shénme?[57] (MC)
Zhangsan be eat-ASP what
張三 是 吃了 什麼
"What did Zhangsan eat?"

Regarding the effect observed above, Tsai (2012) suggests that it is possible to get rid of this weak intervention effect by putting stress on the *wh*-object to emphasize its de-D-linking effect.

(9) Zhāngsān dàodǐ shì chī-le **SHÉNME**(, cái huì
Zhangsan on-earth be eat-ASP what therefore would
張三 到底 是 吃了 什麼 才 會
dùzi tòng de zhème lìhài)? (MC)
stomach be.painful RES so serious
肚子 痛 得 這麼 厲害
"What on earth did Zhangsan eat? (He has a serious stomach ache).

By emphasizing the *wh*-object in a sentence containing *dàodǐ* (到底), the *wh*-element in (9) refers to only a specific set in the discourse, and the sentence becomes grammatical.

What is intriguing is that no intervention effect is found in a parallel *wh*-nominal question in TSM, even without the stress and the *on earth* adverbial.

(10) Tsuí-sūn sī tsiȧh siánn? (TSM)
Tsuisun SI eat what
水順 是 食 啥
"(I suppose Tsuisun ate something). What did Tsuisun eat?"

The intuition from native speakers regarding a question like (10) 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, a sense compared to the de-D-linking effect observed in MC in Tsai 2012. In other words, unlike *shì* (是) in MC, which triggers the

[57] Many Mandarin speakers in Taiwan consider this sentence totally unproblematic. This is presumably a dialectal difference due to language contact between MC and TSM.

intervention effect that can only be diminished by stress or additional adverbials, *sī* (是) in TSM, when used in a *wh*-question, does not trigger an intervention effect, but it brings up a D-linking construal instead.

The difference between these two languages can be further demonstrated by the (non-)possibility of flanking an adverb between *sī* / *shì* and *v*P. Below are some examples:

(11) a. Tsuí-sūn sī hiông-hiông-kông-kông beh khì tó-uī? (TSM)
Tsuisun SI hastily will go where
水順 是 雄雄狂狂 欲 去 佗位
"(We know that Tsuisun hastily went out). Where is Tsuisun hastily going?"

b.* Zhāngsān shì huānghuāngzhāngzhāngdi yào qù nǎlǐ? (MC)
Zhangsan be hastily will go where
張三 是 慌慌張張地 要 去 哪裡
(Intended) "(We know that Zhangsan hastily went out). Where is Zhangsan hastily going?"

Sentence (11) shows a case where a manner adverb is present. Interestingly, the manner adverb cannot intervene *be* and the light verb in MC, but the intervention is acceptable in TSM.

Now let us look at examples involving temporal adverbs:

(12) a. Tsuí-sūn sī tú-tsiah tú-tio̍h siánn-lâng? (TSM)
Tsuisun SI a.moment.ago encounter-ASP who
水順 是 拄才 拄著 啥人
"(We know that Tsuisun just ran into someone). Who did Tsuisun encounter a moment ago?"

b.* Zhāngsān shì gāngcái yùjiàn-le shéi? (MC)
Zhangsan be a.moment.ago encounter-ASP who
張三 是 剛才 遇見了 誰
(Intended) "(We know that Zhangsan just ran into someone). Who did Zhangsan encounter a moment ago?"

(13) a. Tsuí-sūn sī bîn-á-tsài beh khì bé siánn? (TSM)
Tsuisun SI tomorrow will go buy what

水順　是　明仔載　欲　去　買　啥

"(We know that Tsuisun will buy something tomorrow). What is Tsuisun going to buy tomorrow?"

b.*Zhāngsān shì míngtiān yào qù mǎi shénme? (MC)
Zhangsan be tomorrow will go buy what
張三　是　明天　要　去　買　什麼

(Intended) "(We know that Zhangsan will buy something tomorrow). What is Zhangsan going to buy tomorrow?"

In (12) and (13), we have the temporal adverbs "a moment ago" and "tomorrow" respectively. Just as observed with manner adverbs, these adverbs can be flanked by "be" and a light verb only in TSM and not in MC.

The same phenomenon can also be illustrated in examples with locative adverbs as below:

(14) a. Tsuí-sūn sī tī hia teh kíng siánn? (TSM)
Tsuisun SI in there ASP select what
水順　是　佇　遐　咧　揀　啥

"(We know Tsuisun is sifting through the stall there). What is Tsuisun selecting there?"

b.* Zhāngsān shì zài nálǐ tiāoxuǎn shěme? (MC)
Zhangsan be in there select what
張三　是　在　那裡　挑選　什麼

(Intended) "(We know Zhangsan is sifting through the stall there). What is Zhangsan selecting there?"

As shown above, the contrast emerges again when it comes to locative adverbs.

Here's the last pair of examples for this kind:

(15) a. Tsuí-sūn sī bô-tāi-bô-tsì tshut-khì tshòng siánn? (TSM)
Tsuisun SI without.a.cause out-go do what
水順　是　無代無誌　出去　創　啥

"(We know that Tsuisun went out without a good reason). What is Tsuisun going out to do?"

b.* Zhāngsān shì wúyuánwúgù zhūqù zuò shénme? (MC)

Zhangsan be without.a.cause out. go do what
張三 是 無緣無故 出去 做 什麼
"(We know that Zhangsan went out without a good reason). What is Zhangsan going out to do?"

The two sentences in (15) demonstrate that the same contrast remains when the flanked adverb is a causal one.

4.2.2 Identifying the element

So far, the de-D-linking sense in (10) suggested by Tsai (2012) and the interpretations of the exemplifying sentences in (12)-(15) suggest the function of this *sī* (是), which is absent in MC, meets the description of the dictum focus marker seen in the previous chapter, and that it is used to mark the semantic content of the speaker's speech act as given within the discourse model.[58] In Creswell's (1999) words, dictum

[58] A relevant item in MC, which has drawn a lot of attention, *dàodǐ* (到底), translated as "*wh*-the hell," is seemingly the counterpart of the usage of *sī* (是) discussed here. When they are used in a question, it is true that their functions look quite similar to each other. For instance:

i) Zhāngsān dàodǐ lái-bù-lái? (MC)
張三 到底 來不來
Zhangsan the-hell come-NEG-come
"Will Zhangsan come anyway?"

ii) Tsuí-sūn sī beh lâi --bô? (TSM)
水順 是 欲 來 無
Tsuisun SI will come Q
"(We heard the news that Tsuisun is coming). Will Tsuisun come?"

However, there are at least two aspects that indicate they should not be considered parallelly. Firstly, *dàodǐ* (到底) has been borrowed into TSM to become *tàu-té,* after phonological adaption. It is possible to have *tàu-té* and the usage of *sī* (是) in question co-occur in a sentence. Note the example below:

iii) a. Tsuí-sūn tàu-té kin-á-ji̍t sī beh lâi --bô? (TSM)
水順 到底 今仔日 是 欲 來 無
Tsuisun the-hell today SI will come Q
"(We heard the news that Tsuisun is coming). Will Tsuisun come today anyway?"

b.* Tsuí-sūn sī kin-á-ji̍t tàu-té beh lâi --bô?
水順 是 今仔日 到底 欲 來 無
Tsuisun SI today the-hell will come Q
"(We heard the news that Tsuisun is coming). Will Tsuisun come today anyway?"

Interestingly, these two elements can occur without being next to each other; moreover, their relative positions are rigid, such that *tàu-té* has to precede *sī* (是) but not the inverse.

Secondly, only *sī* (是) occurs in a non-interrogative and maintains its interpretation as a dictum focus marker, contrary to *tàu-té*, which can only be used in a question. Compare the two sentences in the following:

iv) a. Bîn-á-tsài sī it-tíng ē lo̍h-hōo. (TSM)
tomorrow SI definitely will rain
明仔載 是 一定 會 落雨
"(We all know that) it will rain tomorrow."

b.* Bîn-á-tsài tàu-té it-tíng ē lo̍h-hōo.
tomorrow the-hell definitely will rain

focus is used to indicate that certain information expressed in an utterance must already be part of the common ground of the discourse (Stalnaker 1974; cf. Romero & Han 2004). According to Creswell (1999), when dictum focus is involved, the denotation of the *wh*-question must already be part of the context set. Creswell (1999) further deliberates that 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[59].

Here is an example (Creswell 1999 (15)):

(16) 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 (1999), 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.

Recognizing the element *sī* (是) occurs in examples from (10) to (15), as the dictum focus marker is not only supported by its denotation, but also evidenced by its relative positions with respect to other adverbs. Remember the dictum focus *sī* (是)

明仔載　　到底　一定　　會　　落雨
(Intended) "(We all know that) it will rain tomorrow."
Based on these, I agree with Huang & Ochi (2004) in pinpointing *dàodǐ* (and its counterpart *tàu-té*) under Att(itude)P in contrast to the usage of *sī* (是), which is suggested to be accommodated in a lower projection in this chapter.

[59] In a general and plain sense, focus can be thought as a concept that deals with how information in one phrase relates to information that has come before. Researchers in the generative camp and the functional camp sometimes employ this term differently. For example, generative linguists use this term to refer to words or expressions that are either prosodically or syntactically prominent, generally because they introduce "new" or "contrastive" information; functionalists may use it to refer to words or expressions that establish coherence in the text or conversation. It is noteworthy that Creswell adopts the term "dictum focus" in a way different from the prevalent fashion, such that what it marks is the subject-oriented presupposed proposition. Even so, the contrast between the presupposed versus the non-presupposed still exhibits the alternativeness, the core characteristic of focus pointed out in the generative literature (for example: Rooth 1985).

immediately precedes *leh*^{3} (咧), and *leh*^{3} (咧) has been located as follows: (Repeating (17) in chapter 3).

(17) Speech act > *leh*^{3} > Evaluative > Epistemic > Subject-oriented >Manner

Based on (17), *sī* (是), employed as a dictum focus marker, should follow speech-act adverbs and precede evaluative adverbs.[60]

To see whether empirical data supports our claim of this *sī* (是) as a dictum focus marker, we will resort to questions in which a high adverb occurs, since the examples given previously are interrogatives.[61]

According to Bellert (1977), the occurrence of speaker-oriented adverbs, such as evaluative (*fortunately*), evidential (*evidently*) and some modals (*possibly*), will degrade an interrogative as shown in the following (from Bellert 1977:342 and 344):

(18) *Has John surprisingly arrived?

(19) *Has John probably come?

However, it is not totally impossible to have these adverbs in a question. When the question is echoic or rhetorical, or when these adverbs express attitudes of the hearer rather than of the speaker, the sentences are not problematic (refer to Ernst 2009 and Speas & Tenny 2003 among others). Here are some examples:

(20) Have they not mysteriously been refusing to answer questions about the budget? (Ernst 2009:499 (5))

(21) Who evidently knew the victim? (Speas & Tenny 2003:335 (35b))

(22) Who unfortunately knew the victim? (Speas & Tenny 2003:335 (36b))

(23) Honestly, who knew the victim? (Speas & Tenny 2003:335 (37b))

In this vein, the following questions that help locate the position of *sī* (是) should not be considered "out of the blue." A possible context will be provided for these sentences.

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[60] In some cases, the presence of the dictum *sī* (是) may give rise to an impatient construal, even with *teh* (咧). This construal is probably an implicature derived from marking the proposition as old and, consequently, the speaker presupposes the addressee should have acted (noticed, answered, dealt with) on the relevant issue.

[61] Note that dictum focus *sī* (是) can also be used in a declarative. The reason why we do not employ declaratives to pinpoint its syntactic position is that this marker is easily confused with another usage of *sī* (是) introduced in 4.3, when there is no explicit context. We will exemplify how context helps to distinguish these two usages in 4.4.

In the following examples, “playing dumb” (24) is used with evaluative adverbs; (25) for epistemics; and (26) for speech-act adverbs.

(24) Context: A is bragging about his success in running a store. A’s wife is unhappy about his ignoring her contributions and says: (TSM)

Lí	kóng,	lí	kin-á-jit	ē-tàng	tsò	kah	tsiah	hó, …
you	say	you	today	can	do	RES	so	good
你	講	你	今仔日	會當	做	甲	遮	好

“Tell me the reason that you can be so successful today…”

a.

lí	sī	hó-ka-tsài	khì	tshuā-tio̍h	siánn-lâng?
you	SI	fortunately	go	marry-ASP	who
你	是	好佳哉	去	娶著	啥人

“(You fortunately married someone). Who did you fortunately marry?”

b.#

lí	hó-ka-tsài	sī	khì	tshuā-tio̍h	siánn-lâng?
you	fortunately	SI	go	marry-ASP	who
你	好佳哉	是	去	娶著	啥人

(Intended) “(You fortunately married someone). Who did you fortunately marry?”

(25) Context: The mother of a teenager running away from home worries very much. After filing a police report, she heard that the police now have some clues about where her son went. Due to prudence, the police does not inform the mother immediately. The mother can’t wait anymore, and she says:

Lín	bîng-bîng	ū	tsi̍t-kuá	suànn-soh	--ah.	Mài	koh
you	evidently	have	some	clue	ASP	do.not	still
恁	明明	有	一寡	線索	矣	莫	閣

ún-muâ	--guá	--ah.	Kín	kā	guá	kóng, …
conceal	I	ASP	hurry	to	I	say
隱瞞	我	矣	緊	共	我	講

“It’s evident you already have some clues. Stop hiding them from me. Tell me immediately…”

a.

I	sī	huān-sè	tsáu	khì	tó-uī	--ah?
he	SI	maybe	run	go	where	ASP
伊	是	凡勢	走	去	佗位	矣

"(We know already that he may be in some specific place). Where did he possibly go?"

b.#	I	huān-sè	sī	tsáu	khì	tó-uī	--ah?
	he	maybe	SI	run	go	where	ASP
	伊	凡勢	是	走	去	佗位	矣

(Intended) "(We know already that he may be in some specific place). Where did he possibly go?"

(26) Context: B just found that her boyfriend A has been a two-timer for several years. She is so angry and says:

Lí	koh	beh	phiàn	guá	juā-kú?
you	still	want	cheat	I	how-long
你	閣	欲	騙	我	偌久

"How long do you think you can lie to me?"

a.#	Lí	sī	láu-si̍t-kóng	ài	tó	tsi̍t	ê?
	you	SI	frankly	love	which	one	CL
	你	是	老實講	愛	佗	一	个

(Intended) "(We know that you love only one of the two). Frankly, which one do you love?"

b.	Lí	láu-si̍t-kóng	sī	ài	tó	tsi̍t	ê?
	you	frankly	SI	love	which	one	CL
	你	老實講	是	愛	佗	一	个

"(We know that you love only one of the two). Frankly, which one do you love?"

Among these, note especially the contrast between (26)a and b; it is not totally impossible to have the speech-act adverb *láu-si̍t-kóng* (老實講) before *sī* (是) in a question, but this can only be found in an echoic question. And these two different usages should not be confused.

From examples above, we can see that, indeed, syntactically this *sī* (是) occurs in a *wh*-question with a presupposition precedes both evaluatives and epistemics, but follows speech-act adverbs. That is to say, in addition to its interpretation, the relative positions between this *sī* (是) and *leh*^{3} (咧) also support our claim that this *sī* (是) is the

dictum focus marker identified in the previous chapter. Based on (17), we then have the following hierarchical order for the dictum focus marker *sī* (是):

(27) Speech act > *sī* $^{\text{dictum.focus}}$ (是) > Evaluative > Epistemic > Subject-oriented > Manner

As seen in the examples, this kind of *sī* (是) occurs in either a question asked by someone who already knows the answer or a question with a presupposition, for instance: presupposing the addressee has an answer. In both cases, the semantic content of the speaker's speech act is considered within the discourse model; that is to say, the denotation has to be part of the common ground of the discourse. According to Creswell (1999), when a *wh*-question contains a dictum focus, the denotation of the *wh*-question must already be part of the context set. Under an analysis of questions as partitions over the context set, an "old" question can be defined as one included in a previous one (Groenendijk & Stokhof 1984). Creswell (1999) further points out that 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. She describes the pragmatic effect of dictum focus as marking the propositional content of the speech act as old. Here, I follow her to claim that dictum focus signals the presupposedness of the propositional content of the speaker's speech act.

4.3 One more kind of *be*

So far, we have identified the dictum focus marker which occurs between the speech-act and the evaluative adverbs. What is intriguing is that *sī* (是), in some other cases, does precede a speech-act adverb.

The four sets of examples below demonstrate that there is another *sī* (是), which can be used before a speech-act adverb and, consequently, precedes all the adverbs that are hierarchically lower in contrast to their MC counterparts, in which *shì* (是) can only occur after these adverbs.

Note that similarly to those previous examples, these sentences cannot be used out of blue. Each set of them is provided with a context or in a conversation.

sī (是) > EPISTEMIC

(28) Context: A detective is interrogating a witness, and he wants to find out whether

the suspect has been to the scene of the crime. The witness answers:

a.	Tsuí-sūn	**sī**	**huān-sè**	bat	khì	hia.	Guá	mā	m̄-kánn	
	Tsuisun	SI	perhaps	ASP	go	there	I	PRT	NEG.dare	
	水順	是	凡勢	捌	去	遐	我	嘛	毋敢	
	khak-tīng.									(TSM)
	be.sure									
	確定									

"PERHAPS Tsuisun has been there; I can't be sure."

b.*	Zhāngsān	**shì**	**huòxǔ**	qù	guò	nà-lǐ….	(MC)
	Zhangsan	SI	maybe	go	ASP	there	
	張三	是	或許	去	過	那裡	

(Intended) "PERHAPS Zhangsan has been there..."

sī (是) > EVIDENTIAL

(29) Context: A friend of B is questioning the information that Tsuisun confirmed he will show up today. B replies with:

a.	Tsúi-sūn	**sī**	**bîng-bîng**	ū	kóng	beh	lâi	--ê	--oo,	m̄-sī	
	Tsuisun	SI	evidently	have	say	will	come	PRT	PRT	not	
	水順	是	明明	有	講	欲	來	的	喔	毋是	
	hong-siann,	sī	guá	tshiann-tio̍h	i	tshin-sin	kóng	--ê.			(TSM)
	rumor	SI	I	heard	he	in.person	say	PRT			
	風聲	是	我	聽著	伊	親身	講	的			

"EVIDENTLY Tsuisun said that he will come. That's not only what I heard about. I was told so by him personally."

b.*	Zhāngsān	**shì**	**míngmíng**	shuō	tā	huì	lái	de	ya, ...	(MC)
	Zhangsan	be	evidently	say	he	will	come	PRT	PRT	
	張三	是	明明	說	他	會	來	的	呀	

(Intended) "EVIDENTLY Zhangsan said that he will come..."

sī (是) > EVALUATIVE

(30) Context: A boy is complaining that he is so unlucky that he caught a cold and cannot join a trip with his classmates. His mother just learned from the news that his classmates had a serious car accident during the trip. And she says:

a. Lí khuànn, lí **sī** **hó-ka-tsài** kám-mōo --neh, m̄-thang koh
you see you SI fortunately catch.a.cold PRT should.not still
你 看 你 是 好佳哉 感冒 呢 毋通 閣
kóng ka-kī sue --ah. (TSM)
say self bad.luck ASP
講 家己 衰 矣
"See! It is fortunate that you caught a cold. Stop complaining that you have bad luck."

b.* Nǐ kàn, nǐ **shì xìnghǎo** gǎnmáo ne… (MC)
you see you be fortunately catch.a.cold PRT
你 看 你 是 幸好 感冒 呢
(Intended) "It is fortunate that you caught a cold..."

sī (是) > SPEECH-ACT

(31) A: Mài ké --ah --lah! Io siám --tio̍h niā-niā. Sī leh
do.not pretend PRT PRT lower.back sprain ASP only SI LEH
莫 假 矣 啦 腰 閃 著 爾爾 是 咧
it-ti̍t ai án-tsuánn! (TSM)
continuously moan how
一直 哀 按怎！
"Come on! It's nothing but spraining your back. Stop groaning!"

B1: Guá **sī** **láu-si̍t-kóng** thiànn kah beh sí --neh! M̄-sī leh
I SI frankly hurt RES will die PRT not ASP
我 是 老實講 疼 甲 欲 死 呢 毋是 咧
phiàn --lín --ê --lah. (TSM)
cheat you PRT PRT
騙 恁 的 啦
"FRANKLY, the pain is killing me. I am not faking."

B2:* Wǒ **shì lǎo-shì-shuō** tòng dé yào mìng ne... (MC)
I be frankly hurt RES want life PRT
我 是 老實說 痛 得 要 命 呢
(Intended) "FRANKLY, the pain is killing me…"

The capitalized parts in the translations indicate where the focus is laid. The contrast illustrated above, to my knowledge, is not depicted in the literature, and it needs explanation.[62]

By carefully examining the readings of the sentences above, we can see that all of them convey a construal that the speaker emphasizes the not-at-issue commenting adverb in the sentence. The scope of this *sī* (是) can be further demonstrated below.

(32) I sī hó-ka-tsài tshuā-tio̍h tsit-ê bóo, m̄-sī pháinn-ūn
he SI fortunately marry-ASP tsit-CL wife not unfortunately
伊是 好佳哉 娶著 這个 某 毋是 歹運
tshuā-tio̍h tsit-ê bóo. (TSM)
marry-ASP this-CL wife
娶著 這个 某。
"It is the case that he fortunately married this woman, and it is not the case that he unfortunately married this woman."

With this contrast in mind, it is noteworthy that both dictum focus *sī* (是), and the *sī* (是) discussed in this section may precede an evaluative adverb and other adverbs that are hierarchically lower. Therefore, we should not be surprised to find cases in which the sentences look the same on the surface but in which the *sī*s (是) occur in them are not of the same item.

In languages that have no corresponding overt marker, the same effect can be achieved either by a cleft or a phonological stress.

(33) "It is fortunate that you have such parents. You don't need to arrange to pay your tuition fees yourself."

(34) Lí sī hó-ka-tsài ū tsiah-nī hó ê lāu-pē lāu-bú. M̄-bián
you SI fortunately have so good LK father mother not.need
你 是 好佳哉 有 遮爾 好 的 老爸 老母 毋免

[62] During my investigation, some dialectal variance was noticed. Not all speakers I consulted accepted *sī* (是) to precede *láu-si̍t-kóng* (老實講). However, this usage does exist among some TSM speakers. The existence of this relative order is also evidenced by Hakka. Both Hakka speakers I consulted confirmed that *he* (係), the Hakka counterpart of *sī* (是), can precede *losiidgong* (老實講; frankly) in their dialects under some specific contexts. Among these two consultants, one speaks Northern Sìxiàn and the other Southern Sìxiàn. What is important here is that the Southern Sìxiàn speaker told me that this kind of usage is new in Hakka, and probably borrowed from Taiwanese Mandarin.

ka-kī tsông tsînn la̍p ha̍k-huì. (TSM)
self raise money pay tuition
家己 傱 錢 納 學費
"It is fortunate that you have such parents. You don't need to arrange to pay your tuition fees yourself."

(35) A: Karl hat BESTIMMT nicht gelogen. (German; Höhle 1994 (4))
Karl has certainly not lied
"Karl CERTAINLY didn't lie."
B: (Nein) Karl HAT nicht gelogen.
no Karl has not lied
"(No,) Karl did NOT lie."

By having the adjectival form of "fortunately" as the cleft constituent, (33) attains a comparable interpretation of (34). As for (35), note especially (35)A stresses the speaker-oriented adverb "bestimmt" (certainly). By doing so, it derives a meaning similar to "it is certain that…" or "I'm sure that…," and the not-at-issue part of the sentence is focused.

Remember that, given the two-dimensional semantics of Potts (2005) adopted in this study, the semantic computation of a sentence containing speaker-oriented expressions includes not only the semantic core (at-issue entailment) but also an additional contribution that the speaker makes to an utterance. The latter is the speaker-oriented comment on a semantic core. And by CI application, the denotation of a sentence may involve two truth-values; one belongs to the at-issue proposition, and the other to the speaker-oriented comment.

Though a different scope is taken, this usage of *sī* (是) in question conforms to the definition of verum focus, whose alternative values can be either the proposition and its negation or a scale of probability of being true (e.g., definitely true; probably true; possibly true; possibly not true; definitely not true) (Höhle 1992). In either case, it is the truth of the proposition that is focused (Creswell 1999; cf. Romero & Han 2004).

By way of example (Creswell 1999 (23)):

(36) A: Sharon has the crazy idea that you went to see *The Matrix* twice, but I don't believe her.
B: No, she's right. I DID go to see *The Matrix* twice.

In (36)B, the verum focus is used to affirm the truth value of the proposition.

In our examples, it only differs in that this *sī* (是) picks up a truth-value from another dimension, the one belongs to the speaker comments. By employing this marker, the speaker emphasizes the truth of his comments on the proposition. Hence, we may call this *sī* (是) a marker of commenting-verum focus (CVF).

The CVF marker is pinpointed below based on (28)–(31).

(37) *sī* $^{\text{CVF}}$ (是) > Speech act > *sī* $^{\text{dictum.focus}}$ (是) > Evaluative > Epistemic > Subject-oriented >Manner

4.4 Distinguishing the two markers

Before we proceed, I would like to discuss how the two homonymous markers can be better teased out in addition to their being demarcated in syntax.

Firstly, we will identify a kind of *shì* (是) employed by, at least, some MC speakers. Secondly, we will examine some examples, without the help of demarcating adverbs, to distinguish which *sī* (是) is at work.

4.4.1 A note for dialectal variances

In my field work, some dialectal variances regarding the grammatical judgments of the MC sentences from (28) to (31) were found. Many MC speakers from Taiwan did not rule out these sentences outright. The judgments vary from being marginal to ungrammatical. All of my consultants who are MC speakers from Northern China rejected the possibility of putting *shì* (是) before any epistemic and evaluative adverbs. The dialectal variances may be due to language contact and indicate a new usage of *shì* (是) in MC under development.

What is noteworthy is that, even for those who can more or less accept *shì* (是) to precede an evaluative or epistemic adverb, no MC speaker, according to my survey, accepts *shì* (是) to occur before a speech-act adverb. This seems to suggest that a recently devised dictum focus or CVF marker is now adopted by some MC speakers, but the "be" that can precede a speech-act adverb is still a privilege in TSM.

Below is an example from one of the MC speakers who can have *shì* (是) to precede an epistemic:

(38) Tā shì huòxǔ huì gǎibiàn zìjǐ, búguò tā yàoshì bù gǎi ne?
he be maybe will change self but he if not change PRT
他 是 或許 會 改變 自己 不過 他 要是 不 改 呢
(Taiwanese Mandarin)
"It is true that he maybe will change himself, but what if he does not change?"

According to the speaker who provides this sentence, (38) has a concession reading to (often tentatively) acknowledge the truth of the proposition of the sentence in which *shì* (是) appears. Based on the speaker's intuition, we may also translate the exemplifying sentence by beginning with "even though…" or "given that..."

Remember, in 4.1 we follow Creswell (1999) to define dictum focus as not only marking the denotation of its clause as old but rather signaling the presupposed quality of the propositional content of the speech act. Moreover, Creswell (1999) describes the pragmatic effect of it as marking the propositional content of the speech act as old.

In (38), the antecedent clause repeats what is mentioned or provided in the context, and the speaker makes a following comment based on presupposing the proposition of the antecedent clause is true. Therefore, I suggest this *shì* (是) a dictum focus marker in Taiwanese Mandarin, probably adopted from TSM.

4.4.2 Some other examples

Though we have seen that syntactically dictum focus is lower than CVF, sometimes it is not easy to distinguish dictum focus from CVF, just like Creswell's (1999) observation on dictum and verum focus, especially when there's no adverb to delimit the position of them. This is not surprising, for they are very context sensitive and in some contexts, both usages are felicitous.

Below are two examples, one adapted from a TV commercial and the other from a daily conversation. Due to language contact, this kind of usage has been borrowed into Taiwanese Mandarin, in which a parallel instance is provided.[63]

(39) Context: A keeps on asking B to google a lot of things for him. B becomes impatient and says:

a. Lí sī bē-hiáu tsiūnn-bāng --ooh!? (TSM)

[63] (39) is from a commercial of an online rental broker. The original sentence is in Taiwanese Mandarin with a sentence-intial *a* (啊). The context has been revised.

you SI not-know go.online PRT
你 是 袂曉 上網 喔
"Don't you know how to go online?"

b. Nǐ shì búhuì shàngwǎng ou!? (Taiwanese Mandarin)
you SHI cannot go.online PRT
你 是 不會 上網 喔
"Don't you know how to go online?"

In (39)a and b, though no adverb is available to help delimit the position of *sī* (是) / *shì* (是), it is clear that the speaker presupposes the proposition "you do not know how to go online" in a sarcastic way; and the *sī* (是) / *shì* (是) is presumably a dictum focus marker.

Another instance:

(40) Context: B is attractive, and a lot of her colleagues are into her and attentive to her needs. Now they are vying and quarrelling for the opportunity to buy her lunch. She is vexed and says:

a. Guá sī ka-kī bē-hiáu khì, sī--m̄? (TSM)
I SI self not-know go isn't.it
我 是 家己 袂曉 去 是毋
"Can't I go by myself?"

b. Wǒ shì zìjǐ búhuì qù ma? (Taiwanese Mandarin)
I be self cannot go Q
我 是 自己 不會 去 嗎
"Can't I go by myself?"

Similarly, with the dictum focus marker *sī* (是) / *shì* (是), the speaker picks out the proposition "I can't go by myself" as a presupposition ironically. The focus marker is supposed to be a dictum focus one, even though there is no adverbial delimiter.

However, the identity of *sī* (是) / *shì* (是) is context sensitive, and a sentence identical at surface may, in fact, involve two homonymous but different *sī*-s (是) depending on the context. Consider the sentence in (41) under the two different contexts in (42)a and (42)b respectively.

(41) Bîn-á-tsài sī it-tíng ē lo̍h-hōo. (TSM)
tomorrow SI definitely will rain
明仔載 是 一定 會 落雨
“(We all know that) it will rain tomorrow.” or
“(It is certain that) it will rain tomorrow.”

(42) a. Context: A and B are watching the weather forecast on TV and just found that the probability of precipitation is 100% tomorrow.

a-1. Bîn-á-tsài sī it-tīng ē lo̍h-hōo. M̄-koh, mā sī kāng-khuán
tomorrow SI definitely will rain but also be same
明仔載 是一定 會 落雨 毋過 嘛 是 仝款
ài tshut-mn̂g --ah. (TSM)
have.to go.out PRT
愛 出門 啊
“We both know that it will definitely rain tomorrow, but we still have to go out as usual.”

b. Context: A majors in meteorology, and he is sure that tomorrow is a rainy day based on his analysis.

b-1. Bîn-á-tsài sī it-tīng ē lo̍h-hōo. Nā bô, guá thâu tsuî
tomorrow SI definitely will rain if not I head cut
明仔載 是一定 會 落雨 若 無 我 頭 摧
lo̍h-lâi hōo lín tsò í-á tsē. (TSM)
down let you make chair sit
落來 予 恁 做 椅仔 坐
“(It can’t be wrong that) it will rain tomorrow. If it doesn’t, you may cut my head down to make a stool.”

Under (42)a, the proposition in (41) is presupposed. The appropriate follow-up sentences should be like (42)a-1. Under (42)b, it is the truth of the speaker’s epistemic judgment focused and, instead of (42)a-1, (42)b-1 would be the felicitous way to pursue the conversation.

As demonstrated above, it is shown that the two markers can be distinguished not only by their relative positions with adverbs syntactically, but also by the

interpretation of the sentence pragmatically, even though there are cases in which both usages are possible.

4.5 Semantics of the TSM dictum and the CVF marker

In this section, we will look into the semantics of the two markers.

According to our discussion in the previous chapter and in 4.1, the dictum focus marker denotes a pragmatic presupposition and marks the semantic content of the speaker's speech act as given within the discourse modal. Without making it too formalized, I follow the fashion adopted in 3.4.3 and define the denotation of the dictum focus marker as follows:

(43) $[\![sī^{\text{dictum.focus}}\ \text{P}]\!] = 1$ iff P is true and P is marked as presupposed by the speaker.

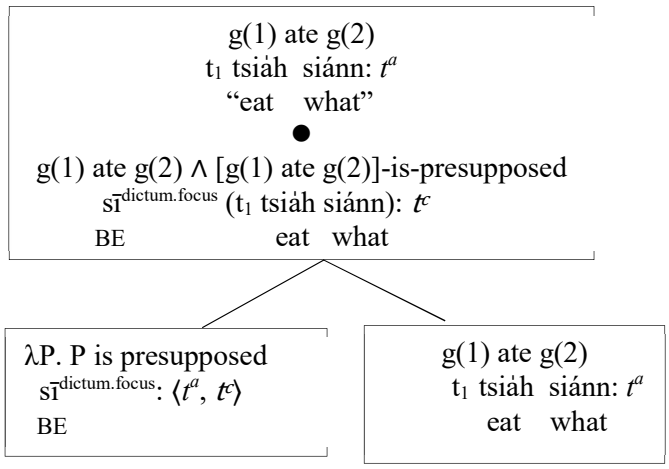
By reproducing (10) in the following passage, the computation of the whole sentence in a compositional way is illustrated in (44)b from the bottom up, step by step. Note that, just as mentioned in chapter 3, obligatory topicalization of the subject is involved when the dictum focus marker is present. Assume an unselective binding scheme for the *wh*-element (Tsai 1994) and an interrogative operator taking sentential scope under Hamblin (1958, 1973)'s and Karttunen (1977)'s proposal for question semantics. Just as in chapter 3, Potts (2005)'s parsetree interpretation is adopted for expressive $sī^{\text{dictum.focus}}$ composition. Tense is ignored in the computation.

(44) a. $[_{\text{IntP}}$ Q $[_{\text{FocP}}$ Op$_2$ …$[_{\text{FocP}}$ Tsuí-sūn$_1$ $[_{\text{Foc'}}$ sī $[_{\text{TP}}$ t$_1$ tsiáh siánn$_2$?]]] (TSM)

Tsuisun	SI		eat	what
水順	是		食	啥

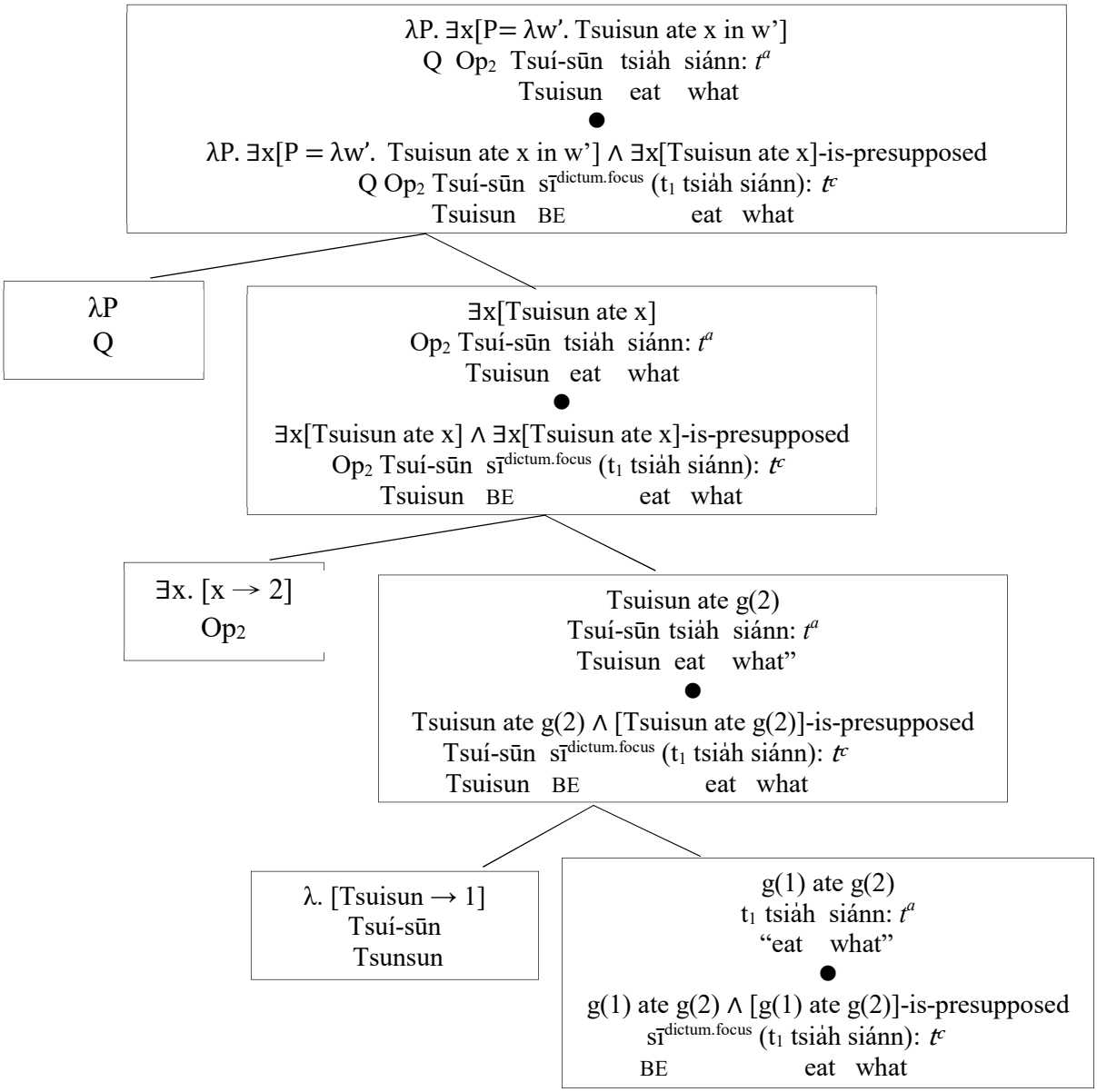
"(I suppose Tsuisun ate something.) What did Tsuisun eat?"

b-1.



In a bottom-up fashion, we first begin with sentence t_1, “eat what,” in which the subject trace is left by the subject obligatorily topicalized. The dictum focus applies to this sentence and brings forth two levels of interpretation: the at-issue content left unmodified (t^a) and the expressive content (t^c).

b-2.



Continuing with what we obtained in (44)b-1, we identify g(1) via predicate abstraction. As for the content question semantics, the question word is considered as an existentially bound variable, and the question is taken as a set of alternatives. Based on the parsetree, the dictum focus marker makes the eating event a presupposition before the merge of the *wh*-variable binder and the interrogative operator, and as a result, the sentence is a question, because it contains a presupposed proposition.

As for the CVF *sī* (是), I reproduce the first sentence of (30)a below as an example. For simplicity, the topicalized temporal adverb is taken as a function that

applies to the "coming" event. The denotation of evaluative adverbs in 0a is from Bonami & Godard (2008), and the extensional realization of *hó-ka-tsài* (好佳哉), "fortunately" in (46)b, is based on the denotation of "luckily" from Potts (2005:140 (4.124); (4.126) and (4.127)). I employ the alternative semantics for focus (Rooth 1985) and assume that the focus semantic value contributes to its negated value; I also employ a scale of probability of the statement being true on the expressive layer.

(45) [$_{FocP}$ Hit-kang$_1$ [$_{Foc'}$ sī [$_{EvalP}$ hó-ka-tsài… [$_{TP}$ t$_1$ i ū lâi.]]]] (TSM)

that-day SI fortunately he have come

彼工 是 好佳哉 伊 有 來

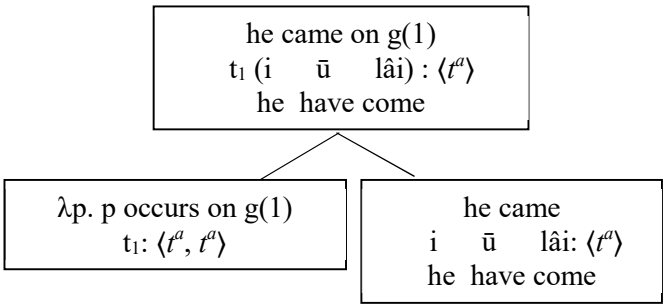
"It is fortunate that he was there on that day."

(46) a. λp. ∀* [p →**adjective**(p)]

p is a variable over propositions, ∀* denotes a universal closure operation, and **adjective** is the content of the evaluative adjective corresponding to the adverb.

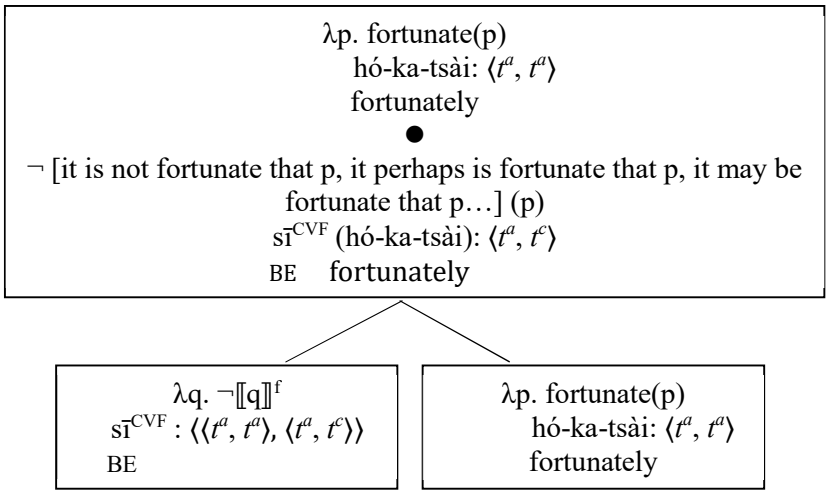
b. *hó-ka-tsài* → λp. fortunate(p): ⟨t^a, t^a⟩

c-1.



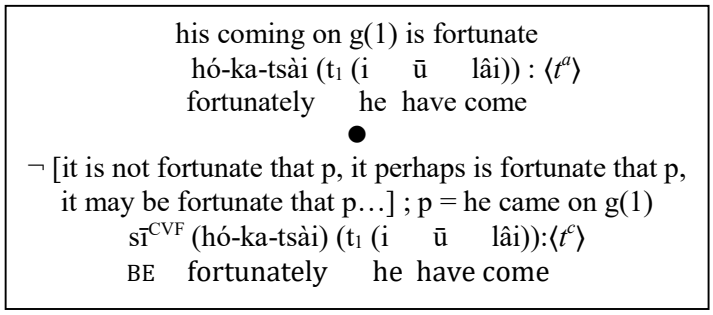
Again, we employ a bottom-up process and begin with the sentence "he-have-come." For simplicity, the temporal adverbial is assumed to be a function that takes this sentence as its argument. The time part is noted with g(1) for the temporal adverbial is topicalized and leaves a trace behind.

c-2.



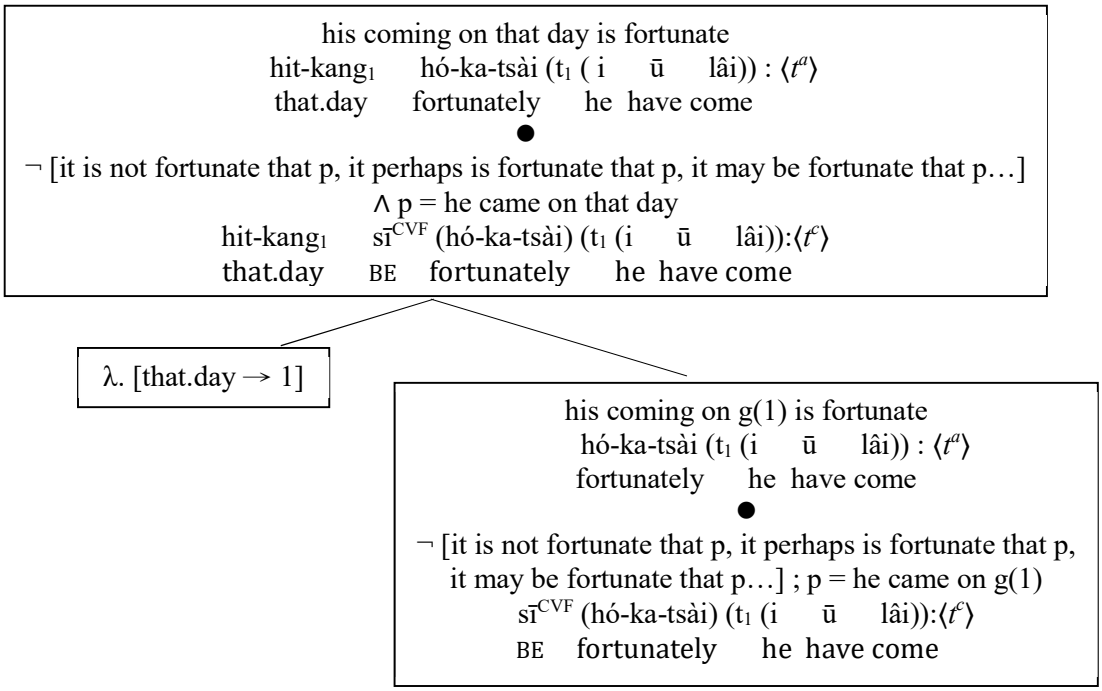
In c-2, we have the evaluative adverb being applied by the commenting-verum focus marker. In the two-level result, we have the unmodified at-issue evaluative adverb, a function that takes an at-issue truth value as its argument, and the expressive content produced by the composition between the focus marker and the evaluative adverb.

c-3.



By applying (46)c-2 to (46)c-1, we then have (46)c-3, in which the sentence "he-have-come" is fed as an argument to both of the functions on the two levels.

c-4.



And as the last step of the computation, in (46)c-3, by predicate abstraction, the temporal adverbial value is identified.

Based on the composition shown above, the CVF marker does not change the at-issue reading of this sentence. The CVF marker creates an alternative set, which contains the negation of the speaker's comments and a scale of probability of the comments being true (e.g., definitely true; probably true; possibly true; possibly not true; definitely not true) (Höhle 1992). Negation of the alternative set becomes the expressive part of the semantics. As a result, the sentence reads "it is fortunate that he was there on that day, and it is untrue that this thing is not fortunate, or perhaps it is fortunate or maybe it is fortunate…" Therefore, we have the truth of the not-at-issue part focused. Hence, it is suggested that the CVF marker is a verum focus that does not aim at the truth of the core proposition.

4.6 CVF and predicate-focus

So far, it has been argued that *sī* (是) in TSM can be used as either a dictum focus marker or a CVF marker, which is a verum focus marker on the truth of another dimension instead of the core semantics. Hence, we have two more usages in addition to the several usages observed in previous studies on *sī* (是) and its cognates in other Sinitic languages. Recall that Creswell 1999 and Höhle 1992 suggest that the verum

focus marker's function is to focus the truth of the proposition. Interestingly, this is also one of the two functions of the predicate-focus in TSM and MC. According to Lee (2005:49, 222–223, and 247, among other sections), the predicate-focus structure is comprised of a structure emphasizing the truth-value of the proposition and a structure with a focused element inside the predicate. In other words, when *sī* (是) / *shì* (是) occurs in the predicate-focus structure, the focus scope of *sī* (是) / *shì* (是) varies; it can focus on the verb, the object, or the proposition's truth value.

In this subsection, I will review the predicate-focus marker and will examine the differences between it and the CVF marker. I will argue that predicate-focus is the verum focus on the at-issue proposition, in contrast to the CVF marker, which is the verum focus upon the not-at-issue level.

4.6.1 Predicate-focus

Below is an example of predicate-focus reproduced from Lee (2005:252 (36)):

(47) Zhāngsān shì mǎi-le yì běn shū. (MC)
Zhangsan FOC buy-ASP one CL book
張三 是 買了 一 本 書
a. "Zhangsan BOUGHT a book (not sold a book)."
b. "Zhangsan bought a BOOK (not a magazine)."
c. "Zhangsan bought ONE book (not two books)."
d. "It is true that Zhangsan bought a book."

With respect to the interpretation in (47)d, Lee points out that a tonal stress is usually put on *shì* (是). This highlights the "truth" of the proposition, rather than the predicate's "activity" or "action" (2005:212).

The same usage of *sī* (是), the cognate of *shì* (是), is also found in TSM, and its characteristics are parallel to what Lee observes in MC.

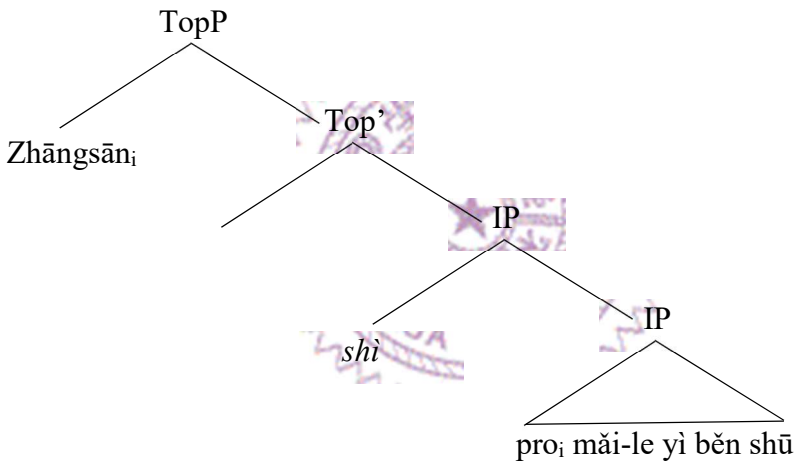
Syntactically, Lee observes that modals, including epistemic and deontic ones, can be dominated by *shì* (是) (and supposedly *sī* (是)) in predicate-focus structures (2005:186). Nonetheless, in Lee 2005, the only epistemic modal illustrated to follow the predicate-focus marker is *kěnéng* (可能). However, *kěnéng* (可能) is notoriously not a proper representative of epistemics in MC (its cognate *khó-lîng* in TSM is not one, either). When it comes to other epistemic modals in MC, speakers cannot have these

modals be preceded by *shì* (是), except for speakers of some specific dialects; this is seen, for example, in sentence (38). Moreover, *kěnéng* (可能) is the only epistemic modal that can derive into A-not-A forms in MC, a sign that it should be considered independently. On the whole, if we exclude the irregular *kěnéng* (可能), no epistemic can follow *shì* (是) in MC, except for some specific MC dialects.

Even though I do not agree with Lee's observation regarding the relative positions between epistemic modals and the predicate-focus *shì* (是), I concur with her analysis in which the marker in question is an IP-adjunct. In fact, her analysis conforms to Tsai's studies, in which epistemics are pinpointed in the CP domain (for example, Tsai 2010; 2015a).

The diagram in (48) depicting (47) is from Lee 2005:253 (37):

(48)



In Lee's words:

> The emphatic marker *shì* serves as a sentential adverbial. It is generated from IP adjunction. The focus scope of the emphatic *shì* is the domain it c-commands. *Shì* can focus on any constituent within its focus domain. Therefore, *shì* can focus on the whole IP, the verb and the object. (2005:253)

As previously mentioned, based on Tsai's observation that epistemic modals are in the CP domain, questions such as "why does the predicate-focus *shì* (是) adjoin to IP?" and "why does it follows epistemics?" can thus be answered under the Cartographic scheme.

Interestingly, Lee's analysis of the predicate-focus *shì* (是) can also account for the counter-examples provided in Cheng 2008, which argues for an all-copula analysis

of *shì* (是) in MC. As Cheng (2008) notices, bare-*shì* sentences, which have no sentence-final *de* (的), are typical examples of *shì* (是) used as a focus marker for the focused element in a bare-*shì* sentence, which is the constituent immediately following *shì* (是). As a piece of evidence against the typical focus marker analysis, Cheng comes up with bare-*shì* sentences that convey broad sentential focus instead of contrastive narrow focus. These sentences are reproduced in the following (Cheng 2008:254–156):

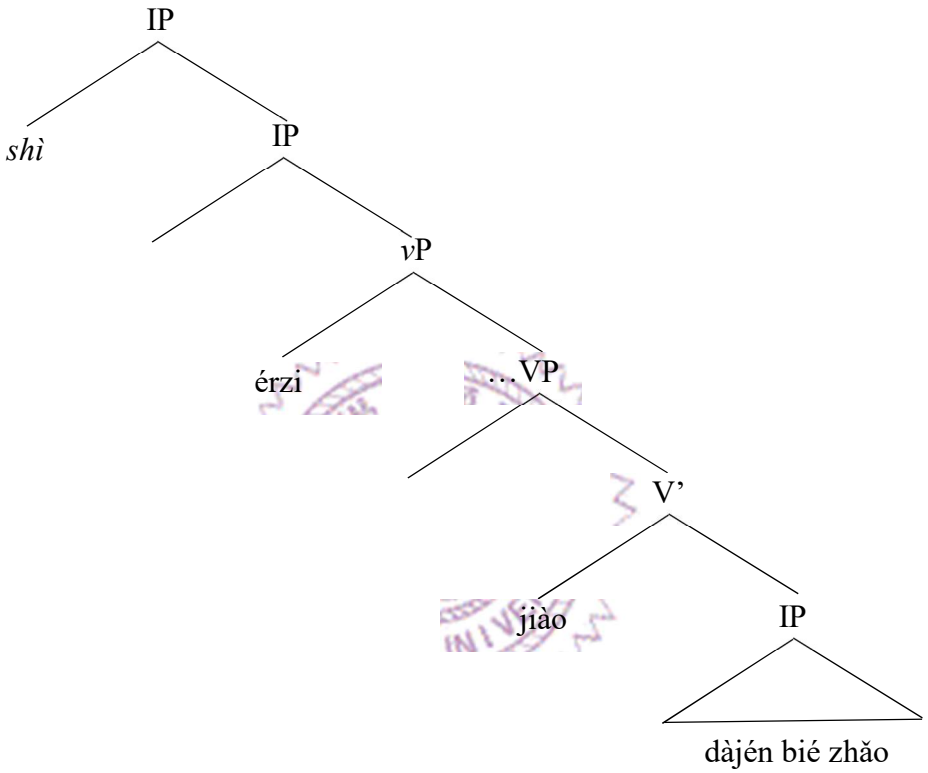
(49) a. Shì tā lái zhǎo wǒ, bú shì wǒ qù zhǎo
be he come look.for me NEG be I go look.for
是 他 來 找 我 不 是 我 去 找
tā. (MC; 2008:256 (45))
him
他
"He came to see me, not I went to see him."

b. Shì érzi jiào dàrén bié chǎo, bú shì dàrén jiào
be son ask adult do.not make.noise NEG be adult ask
是 兒子 叫 大人 別 吵 不 是 大人 叫
érzi bié chǎo.
son do.not make.noise
兒子 別 吵
"The son asked the adult not to make noise, not the adult asking the son."

In Cheng's analysis, all of the *shì*-s (是) in (49) are copulas. Note that these sentences contain neither modals nor epistemics, which indicates that the clauses under *shì* (是) are no bigger than IP (TP). As for the subject which stays behind *shì* (是) as in (47) and (48), one of the possible analyses is to suggest they are in the inner-subject position under *v*P. If this is on the right track, (49) cannot be a counter-example against the focus marker analysis. In Lee 2005, the focus marker that has scope over the constituent immediately following it (in Lee's terminology: subject-focus and adjunct-focus) is an element under CP, whereas in (49), Cheng fails to pinpoint *shì* (是) as being in CP. The sentences in (49), therefore, can be well accounted for in Lee's predicate-focus scheme. By way of example:

(50) a. Shì érzi jiào dàrén bié chǎo… (MC)
be son ask adult do.not make.noise
是 兒子 叫 大人 別 吵
"The son asked the adult not to make noise ….."

b.



Based on 0b, the broad sentential focus noticed by Cheng is not surprising at all, for the element involved in (49) are nothing but predicate-focus markers, which can focus on any part in the constituent that follow them.[64]

Until now, we have seen that, in addition to the verum focus marker functions on the not-at-issue dimension, the CVF marker in TSM, we also have *sī* (是) and *shì* (是) employed as the verum focus on the core semantics. In the next subsection, I will present some cross-linguistic data, to support the two-dimensional verum focus analysis.

[64] This does not mean that the predicate-focus scheme is a one-stop solution for all focus usages of *shì* (是), for Lee (2005) clearly demonstrates that the *shì* (是) that occurs in subject- and adjunct-focus cases is very different from the one used as a predicate-focus marker. Readers may refer to Lee 2005 for details.

4.6.2 Verum focus in a cross-linguistic perspective

So far, I have argued that, unlike the predicate-focus marker, which is dual-functional and can either focus the truth of the at-issue proposition or any part that falls in its scope, the CFV marker in TSM can only emphasize the truth of the not-at-issue sentence portion. In other words, both of them are verum focus markers, but they take different scopes and are not identical.

In fact, their distinct scope taking is also revealed in their syntactic positions. Remember that we located the TSM CVF marker *sī* (是) high in the left periphery, so that it precedes the speech-act adverbs. However, the predicate-focus marker *shì / sī* (是) is an IP-adjunct, based on Lee (2005)'s investigation. The scope disparity result is that elements in the CP domain will be covered by the TSM CVF marker but not by the predicate-focus marker.

The CP domain elements that fall in the scope of the TSM CVF marker but out of the scope of the predicate-focus marker, according to Tsai (2010; 2015a), among others, are epistemics and those elements hierarchically higher than epistemics, including evidentials, evaluatives, and speech-act adverbs. All these elements are common, in that they are beyond the Tense.[65] Unlike root modals, these adverbs are not relativized to the time given by Tense; they are either speaker-oriented or attitude holder-oriented. The former occurs when these elements are employed in the matrix clause, and the latter occurs when they are embedded (Hacquard 2007:309).

Due to their perspective orientation and temporal interpretation, many scholars argue that epistemic modals (and, therefore, other adverbs higher than epistemics) do not contribute to the truth-conditions of the utterance and instead express a comment on the proposition composed by the rest of the utterance (e.g., Halliday 1970; Palmer 1986; Bybee & Fleischman 1995; Drubig 2001). If this is correct, the TSM CVF marker, which has additional scope over these elements, should emphasize the truth of the same proposition as the predicate-focus marker does. Given this, we can't help but wonder why language needs two markers situated in two distinct positions, especially since the predicate-focus marker is found both in MC and TSM. Conversely speaking, the data

[65] With regard to the interaction between tense and epistemic modals, refer to Iatridou 1990, Abusch 1997, and Stowell 2007, among others. For the interaction between aspect and epistemic modals, see Bhatt 1999 and Hacquard 2006, among others. Cinque (1999) provides a cross-linguistic investigation of hierarchical order for adverbials.

presented in this chapter, which indicate two focus markers on the truth of propositions upon different dimensions, suggest that these elements in CP contribute to the truth-conditions of the utterance, as argued by Papafragou (2006).

In fact, under the scheme of CI applications and parsetree interpretation adopted in this dissertation (Potts 2005), we see that truth-conditions do not have to be computed on a single level. In this manner of composition, those elements in CP do contribute to the truth-conditions of the utterance; and the difference only lies in the fact that they contribute to another level of truth-conditions.

The distinction between a high and a low focus marker, since both markers can emphasize the truth of a proposition, is supported empirically by data in other languages, even though it is difficult to differentiate separate positions in those languages, on account of their high syntheticity.

In Samko 2016, it is pointed out that verum focus can be put on either the main verb, the auxiliary verb, or the complementizer. The examples below are cited from Samko 2016:3, originally Höhle 1992 (2), (4), and (48):

(51) Focus on main verb (German)

A: Ich habe Hanna gefragt, was Karl grade macht, und sie hat
I have Hanna asked what Karl now does and she has
die alberne Behauptung aufgestellt, dass er ein DREHbuch
the silly assertion made that he a screenplay
schreibt.
writes
"I asked Hanna what Karl's doing now, and she made the silly claim that he's writing a SCREENplay."

B: (Das stimmt) Karl SCHREIBT ein Drehbuch.
that is right Karl writes a screenplay
"(That's right,) Karl IS writing a screenplay."

(52) Focus on auxiliary verb (German)

A: Karl hat BESTIMMT nicht gelogen.
Karl has certainly not lied
"Karl CERTAINLY didn't lie."

B: (Nein) Karl HAT nicht gelogen.

no Karl has not lied
"(No,) Karl did NOT lie."

(53) Focus on complementizer (German)

A: Ich weiß nicht, OB sie in Rom war (aber WENN das der
I know not if she in Rome was but if that the
Fall ist, muss es vor kurzer ZEIT gewesen sein)
case is must it recently been was
"I don't know if she WAS in Rome (but IF that's the case, it must have been RECENTLY)."

B: Ich bin sicher, DASS sie mal in Rom war (aber ob das
I am sure that she once in Rome was but if that
KÜRZLICH war, weiß ich nicht)
recently was know I not
"I'm sure that she WAS once in Rome (but I don't know if that was RECENTLY)."

Besides the distribution of verum focus emphasis shown above, it is clear that verum focus can fall on a speaker-oriented adverb such as 'bestimmt' (certainly), as illustrated in (52)a, even though there is no overt verum focus marker in German.

Additionally, the fact that there can be more than one focus marker for the truth of a proposition is also evidenced by the existence of more than one way to paraphrase the verum. In Romero & Han 2004, it is suggested that verum can be overtly expressed with the adverb "really" or "be sure" in English. However, after a close inspection, it turns out that the near-synonym "be sure" is not always a replacement for "really." The examples below are from Romero & Han 2004:625–626 (38) and (39):

(54) A: Jorge just visited Birgit and Jorn's newborn baby.
S: Did he bring a present for him?
S':# Did he really bring a present for him?

(55) A: The baby got lots of presents.
S: From whom?
A: From Tobi, from Simone, from Jorge…
S: Did Jorge really bring a present for the baby? I thought he wouldn't have time to buy anything.

As pointed out by Romero and Han, a regular positive question is felicitous in the context of (54), whereas the corresponding *really*-question is odd. The adverb is legitimate only in contexts such as (55), in which we have an explicit negative epistemic bias.

Unlike "be sure," Romero and Han noted that "really" is often epistemically flavored. Therefore, these two are not totally interchangeable. This is demonstrated in the following passages:

(56) a.? I am sure I am tired.
b. I really am tired.

In (56)a, it sounds odd for the speaker to assert certainty about his/her own inner sensations, contrary to (56)b, which employs "really" and simply emphasizes or insists that the addressee should take the proposition as true.

Another example from Romero and Han examines law court scenarios. In these scenarios, they focus on the question and answer after a witness' assertion when the degree of certainty of the assertion is checked. See the example from Romero & Han 2004:626 (42):

(57) S: Mr. Beans, did you see anybody leave the house after 11pm the night of the crime?
A: Yes.
S: Who did you see?
A: I saw Mrs. Rumpel.
S: This is important, Mr. Beans. Are you sure that you saw Mrs. Rumpel leave the house that night?
S':# This is important, Mr. Beans. Did you really see Mrs. Rumpel leave the house that night?

The contrast above is accounted for; according to Romero and Han, contrary to "really," "be sure" fits in this kind of context, for it does not convey any disbelief.

Lastly, Romero and Han also notice that the adverb "really" has several different usages and has corresponding lexical items in other languages, such as Spanish. In addition to the epistemic "really" and the intensifier "really," the same adverb can also be used to mean roughly "in the actual world rather than in some other relevant world"

(2004 fn. 11). Below are the Spanish counterparts that correspond to the in-actuality reading and typical verum reading, respectively (Romero & Han 2004:625 fn.11 (iv)).

(58) a. En realidad, ellos ganaron las elecciones. (Spanish)
in reality they won the elections
"In-actuality" reading: "They (did) really win the elections."

b. De verdad que ellos ganaron las elecciones.
of truth that they won the elections
VERUM reading: "They really (did) win the elections."

With regard to these near-synonyms, I have no intention of matching each of them with the TSM CVF marker or the typical verum usage of the predicate-focus marker. In TSM and MC, there are also groups of "really" near-synonyms; for example, there are at least five words in TSM: *ū-iánn* (有影), *tsin-tsiànn* (真正), *tik-khak* (的確), *tsiânn-sit̍* (誠實), and *khak-sit̍* (確實)), which can be roughly translated as "really," and their denotations deserve an independent and comprehensive study. What I want to emphasize here is that focusing on different levels of a sentence's truth is not abnormal at all, and empirically, we have two overt markers testified in TSM: the CVF marker and the predicate-focus marker; the former focuses on the truth of the speaker-oriented not-at-issue content, and the latter, when used as a verum marker, focuses merely on the truth of the at-issue content.

4.7 Summary

Creswell (1999) argues that dictum focus should be distinguished from verum focus, based on English data. Due to the relatively high syntheticity of the language, the two markers ostensibly occupy the same position. By contrast, we have seen that both markers are overtly realized in three different positions in TSM syntax, probably resulting from TSM's high analyticity. The presence of overt and separate dictum and CVF markers also indicates the rich left periphery of this language, reflecting its propensity to embody pragmatics in syntax. The following sequence summarizes what we have found in both this chapter and the previous one"

(59) [$_{SaP}$ [$_{Sa'}$ ***leh^{1}*** (咧) [$_{SaP}$ [$_{Sa'}$ ***leh^{2}*** (咧) …[$_{FocP}$ [$_{Foc'}$ ***sī^{CVF}*** (是) [$_{Speech\text{-}actP}$ …[$_{FocP}$ [$_{Foc'}$
sī^{dictum} (是) [$_{PartP}$ [$_{Part'}$ ***leh^{3}*** (咧) [$_{EvalP}$ [$_{Eval'}$ [$_{EpistP}$ [$_{Epist'}$ …

Besides the syntax and semantics of these two markers, we also looked into the similarities and differences between the CVF marker and the predicate-focus marker, which can also emphasize the truth of a proposition. It is argued that these two elements are realizations of two verums on different levels of truth of propositions, which are the not-at-issue and the at-issue content, respectively.

CHAPTER 5 THE DISCOURSAL CONTRASTIVE CONNECTIVE

In this chapter, we will turn to the particle *ah* (啊). Due to its versatility, it would be far-fetched to encompass all usages of *ah* (啊) in the following discussion; I will focus on only one usage of *ah* (啊) in TSM: the sentence-initial one, which is pronounced with a high-level tone. My intent in narrowing the scope to this usage is not just to shed light on a usage that has received almost no attention but is to explore a function that seems to be beyond the sentential boundaries, falling in the gamut of this dissertation.

The particle is used frequently in daily conversation and has even been borrowed into Taiwanese Mandarin (TM). Below are two examples:

(1) Ah i bô lâi --neh. (TSM)
AH he NEG come PRT
啊 伊 無 來 呢
"(Contrary to our expectation,) he did not come."

(2) Ā nǐ shì bú huì shàng Wǔyījiǔ zūwūwǎng hio?[66] (TM)
A you be NEG can go.on Wuyijiu rent.house.net PRT
啊 你 是 不 會 上 519 租屋網 hio
"(Though it's well-known,) don't you know to go to 519, the website for rentals?"

I will argue that this particle is a contrastive conjoining introductory element, which is at the high end of the left-periphery, only below the SA shell (Haegeman 2014; Speas & Tenny 2003).

To pinpoint its position and denotation, we will proceed with six consecutive subparts. Before presenting data and sorting out the patterns in 5.2, we will review previous studies in 5.1. I include a preliminary description, its etymology, and some cross-linguistic near counterparts in 5.3. A syntactic analysis is provided in 5.4, followed by a semantic analysis in 5.5. In 5.6, I briefly conclude this chapter.

[66] From the commercial of the online service for rentals. The video is available on youtube.com (https://youtu.be/oxoEsUU19i8). Retrieval date: May 1st, 2017.

5.1 Previous studies

Differing from both the initial and the sentence-final *ah* (啊), the interjection *ah* (啊), which is followed by a pause between it and the following sentence, will not be included in our review. We will focus only on the sentence-initial (without a pause) and the sentence-final occurrences of this particle, excluding the aspect *ah* (矣), which can co-occur with *ah* (啊) and ought to be considered separately. The affixal *ah* (阿) attached to a noun will not be examined, either.

When it comes to particles, attention has been almost completely drawn to those particles occurring at the end of the sentence; this is also the case with *ah* (啊). The following studies investigated the sentence-final *ah* (啊).

According to Tin (1934:206), the sentence-final *ah* (啊) is the counterpart of the Japanese interrogative particle *ka* (か), and it appears at the end of a *wh*-question; whereas, not mentioned by Tin, this particle can also be attached to a declarative in TSM. Therefore, it cannot be an interrogative particle like *ka* (か).

Unlike Tin (1934), Li (1950) indicates that this particle is not a question particle. Instead, it is employed to show that the speaker is determined. It also expresses an ascertaining and a sighing tone. Secondly, Li suggests this particle can convey a sense of wonder, so that it is also used to express wondering, pleading, begging, or gratitude. The same element is found in phrases uttered with surprise: for example, *thinn--ah* (天啊) (Lit. sky *ah*) and *a-bú--ah* (阿母啊) (Lit. mother *ah*). Li noted that the pronunciation of this particle is usually assimilated by the preceding consonant/vowel.[67]

To my knowledge, Lien 1988 is the first detailed investigation on sentence-final particles in TSM. Lien suggests that this particle (spelled *a* by Lien) can be used either as an assertive marker or a directive marker.[68] When it is assertive, it necessarily carries a contradictory function against the addressee's implicit assumption. On the other hand,

[67] Li omits the tone difference and, therefore, also recognizes this particle as a perfect marker (1950:398) with a weaker force than *lah* (啦), according to Li. We should not confuse this with the particle in question; they should be treated as two distinct elements.

[68] Lien also suggests this particle has an inchoative usage. This usage is pronounced with a fixed neutralized tone and should be considered separately. Moreover, Lien includes the intra-sentential *a* in his discussion of assertive *le* and *a*. Again, the item has a different tone and can co-occur with sentence-final *a* (Lien 1988:218 (11)). It is supposed to be a different element.

the same particle can also be used in a directive way; directive *a* can express the speaker's surprise or perplexity as to why the addressee has not executed the instruction that the speaker gave. Based on the pitch height, this element may indicate either indifference or resignation on the part of the speaker.

For Chen (1989), the sentence-final particle is multi-functional and the tone with which it is pronounced is relevant. She provides detailed description for this particle by the tone with which it is pronounced and the sentence type where it is found.

With the low tone, this particle may introduce the following connotations: from a state of ignorance to a state of knowledge; emphatic; correct assumption; intensifying the forcefulness of the order; a new discovery; and surprise. In addition, the particle is attitudinal and is employed to contradict the hearer's claim, to accentuate the *wh*-question words, or to indicate the speaker's surprise when it is found in imperatives, interrogatives, and exclamatory sentences. Moreover, when it is used in an attitudinal manner, it can lay bare the speaker's doubt or curiosity and invite a response. Additionally, this particle signifies a clear presupposition that the speaker knows the answers already when it is attached to either a disjunctive or a *yes-no* question. The same element can also be used to convey different speech-acts, including encouraging, provoking, and proposing.

When this item is pronounced with the mid-level tone, the particle can be an accentuating or emphatic one; it can indicate that something is obvious, it may be express an opinion that an assumption has to be corrected, or it may imply perplexity. Additionally, the same particle can be used to bring out an encouraging, provoking, or proposing sense.[69]

Now, let's turn to *ah* (啊)'s non-sentence-final occurrences. The research reviewed below examines the Mandarin cognate *a* (啊 / 阿) and cognates in other Sinitic languages, including Old Chinese and Middle Chinese.

Focusing on 阿, the presumable cognate of *ah* (啊), which appears in Middle Chinese poems and the Suzhou and Xining dialects, (青海西寧話), Song (1994) argues that 阿 is an intra-sentential interrogative function word. Disagreeing with Song, Zeng

[69] For the same reason as the preceding footnotes, I exclude Chen's discussion about using it as an aspect marker.

(1994) points out that the Middle Chinese examples of 阿 in Song 1994 are semantically vacuous prefixes to a nominal element. Whereas, Zeng concurs with Song's analysis that 阿 is an interrogative in Souzhou dialect, roughly parallel to *kě* (可) in Mandarin.

As an investigation of 阿's etymology, Li (1997) lists four sources as the origins of 阿: 婀, homophonic translation of syllables *a* or *uo* in Sanskrit and other languages, the first person singular pronoun 我, and the interrogative pronoun 何. Regarding the cases in which 阿 is substituted for 何, Li points out that there are two readings observed in the scripts; one reading is negating and the other is interrogative.

Apart from the affixal and intra-sentential occurrences, Li also notices the sentence-initial 阿 in the Middle Chinese data. In these examples, 阿 is followed by a noun that refers to a person or a pronoun. According to Li, this sentence-initial 阿 marks the whole sentence with the interrogative force and marks some with a transferring sense. He suggests that this usage resulted from the influence of Sanskrit syntax, in which the interrogative pronoun leads the sentence. We will see later that the function of initial *ah* (啊) plays a very similar role in TSM.

Though previous studies barely dealt with the sentence-initial occurrences of the element in question, from its sentence-final usages we can see that it is supposed to be either be a mood- or discourse-oriented marker. Li (1997)'s observation on Middle Chinese data suggests potential origins of the sentence- / clause-initial *ah* usage under investigation.

5.2 Data

There are apparently two kinds of sentences that follow the initial *ah* (啊): the self-standing sentences and the ones that continue in a pair.

Note that this usage of *ah* (啊) is not followed by a pause and is pronounced with a high level tone after the tone sandhi.

Below is an example for the self-standing kind of *ah* (啊):

(3) Context: A and B encounter each other in a park in the morning.

A: Gâu-tsá! (TSM)

good.morning

交早

"Good morning."

B: Gâu-tsá!

good.morning

交早

"Good morning."

A:	Ah	kin-á-jit	tsin	hó-thinn	--neh.
	AH	today	very	sunny	PRT
	啊	今仔日	真	好天	呢

"(Unlike some people have predicted / unlike the gloomy weather that we have endured…,) It is sunny today."

In this example, the sentence uttered by A that begins with *ah* (啊) has no explicit or logical connection to the preceding sentences. The sentence and the initial particle seem to come out of the blue.

On the other hand, *ah* (啊) can occur between two conjuncts, as shown in the following:[70]

(4)	Tsuí-sūn	ū	khà	tiān-uē	kiò	Gîn-khuân	lâi,	ah	i
	Tsuisun	have	hit	telephone	ask	Ginkhuan	come	AH	she
	水順	有	敲	電話	叫	銀環	來	啊	伊
	to bô	ài	lâi	--lih.					(TSM)
	PRT NEG	want	come	PRT					
	都 無	愛	來	哩					

"Tsuisun did call Ginkhuan to come, but (in contrast to what we think,) she doesn't want to come (and we just can't help)."

Unlike the previous example, in this instance, *ah* (啊) leads a second conjunct that has a logical relationship with its antecedent; what we have here seems to be a contrasting *ah* (啊). However, this doesn't mean that *ah* (啊) itself is an adversative conjunction, for it is possible to have an adversative conjunction inserted:

(5)	Tsuí-sūn	ū	khà	tiān-uē	kiò	Gîn-khuân	lâi,	(ah)	**m̄-koh**

[70] In the following discussion, the terms "conjunct" and "conjunction" are used in a broad sense, in that they are not confined to words of logical conjunction and disjunction.

Tsuisun	have	hit	telephone		ask	Ginkhuan	come	AH	but
水順	有	敲	電話		叫	銀環	來	(啊)	毋過
(*ah)	i	to	bô	ài	lâi	--lí.			(TSM)
AH	she	PRT	NEG	want	come	PRT			
(*啊)	伊	都	無	愛	來	哩			

"Tsuisun did call Ginkhuan to come, but (in contrast to what we think,) she doesn't want to come (and we just can't help)."

The example above differs from the previous one only in having an additional adversative conjunction *m̄-koh* (毋過), which must be sandwiched between *ah* (啊) and the conjunct sentence. This indicates that *ah* (啊) is not a conjunction and is syntactically higher.

Based on these observations, a natural question to ask is: can *ah* (啊) co-occur with other kinds of conjunctions, such as cumulative conjunctions, alternative conjunctions, or illative conjunctions? Each kind of conjunction is tested below:[71]

(6) *Tsuí-sūn	tsú	tsiah,	ah	Gîn-khuân	piànn	tshù-lāi,	ah	Khìng-î	
Tsuisun	cook	food	AH	Ginkhuan	clean	house-inside	AH	Khingi	
水順	煮	食，	啊	銀環	摒	厝內，	啊	慶餘	
tàu	kòo	tiàm.						(TSM; cumulative)	
help	look.after	shop							
鬥	顧	店							

(Intended) "Tsuisun cooks, and Ginkhuan cleans the house, and Khingi helps manage the store."

(7) a. Hit-kiānn	tāi-tsì,	Tsuí-sūn	(ē	khì	tshú-lí)	ah	iah-sī		
that-CL	thing	Tsuisun	will	go	handle	AH	or		
彼件	代誌	水順	會	去	處理	啊	抑是		
Gîn-khuân	ē	khì	tshú-lí,	mài	huân-ló.			(TSM; alternative)	
Ginkhuan	will	go	handle	do.not	worry				
銀環	會	去	處理	莫	煩惱				

[71] Since we are focusing on the sentence-initial *ah* (啊), we will consider coordinating conjunctions but not subordinating ones. In fact, according to the literature and my survey, *ah* (啊) cannot occur with / in a dependent clause.

"As for that issue, either Tsuisun will deal with it or Ginkhuan will deal with it. Don't worry about it."

b. Lí ài la̍p hua̍t-kim, ah nā bô lí ài khì tsē-kann.
you have.to pay fine AH if NEG you have.to go imprisoned
你 愛 納 罰金 啊 若無 你 愛 去 坐監
"You must pay the fine, otherwise you will be imprisoned."

(8) a.*Bîn-á-tsài beh lo̍h-hōo --ah, ah in-uī hong-bīn (TSM; illative)
tomorrow will rain ASP AH because cold.front
明仔載 欲 落雨 矣 啊 因為 峰面
lâi --ah.
come ASP
來 矣
(Intended) "It will rain tomorrow, because a cold front is coming."

b. Hong-bīn lâi --ah, ah sóo-í bîn-á-tsài beh lo̍h-hōo --ah.
cold.front come ASP AH therefore tomorrow will rain ASP
峰面 來 矣 啊 所以 明仔載 欲 落雨 矣
"A cold front is coming. Therefore, it will rain tomorrow."

Note that there is no sentential cumulative conjunction word in TSM. To avoid a contrasting reading, the example for the cumulative conjunction, which adds one statement to another, is provided in list form, as shown in (6), which was rejected by my consultant. Unlike the cumulative one, the alternative conjunctions, which presented two alternatives, both received a positive judgment, contrary to the *because*-illative conjunctions that express an inference.

So far, all of the exemplifying sentences in which *ah* (啊) is accompanied by a conjunction have an antecedent sentence uttered by the same speaker. Nonetheless, conjunctions can be employed in either a replying or a pursuing fashion. In this case, the antecedent sentence would be from the addressee and the sentence with the conjunction and *ah* (啊) would look like a self-standing one. For example:

(9) A: Guá ná ē khó kah tsiah-nī bái? (TSM)
I how.come would take.an.exam RES so bad
我 哪 會 考 甲 遮爾 穩

"How come I messed up the exam?"

B: Ah (in-uī) lí bô thȧk-tsheh --ah.
AH (because) you NEG read.books PRT
啊 (因為) 你 無 讀冊 啊

"Because you didn't study for it (contrary to what you expect how you can do in an exam without preparing in advance)."

The contrast between (8)a and (9)B tells us that the presence of a conjunction does not assure the presence of a conjoined construction.[72] In fact, the fact that (9)B should not be considered as being conjoined with (9)A is evidenced by the difference in their sentence force. The ungrammaticality of (10), which is the conjoined version of (9), is not surprising at all if we refer to other examples in which an interrogative is conjoined with a declarative, as illustrated in (11).

(10) * Guá ná ē khó kah tsiah-nī bái, in-uī
I how.come would take.an.exam RES so bad because
我 哪 會 考 甲 遮爾 穩 因為
guá bô thȧk-tsheh --ah. (TSM)
I NEG read-book PRT
我 無 讀冊 啊

(Intended) "The reason why I messed up the exam is that I didn't study for it."

(11) * Guá kah-ì tsiȧh siánn guá kah-ì tsiȧh piánn. (TSM)
I like eat what I like eat cookie
我 佮意 食 啥 我 佮意 食 餅

(Intended) "As for what I like to eat, I like cookies."

[72] A similar example is found in Lien 2015b. This example differs in that the omitted conjunct is an adversative one, which is a licensor of initial *ah* (啊) (see (4) and (5)); therefore, no additional licensing particle is needed.

(i) Ah Tâi-uân bô hóo. (Lien 2015b:176 (32))
AH Taiwan not.have tiger
啊 台灣 無 虎
"(In contrast to that place,) there is no tiger in Taiwan."

(ii) Ah (m̄-koh) Tâi-uân bô hóo.
AH but Taiwan not.have tiger
啊 毋過 台灣 無 虎
"(In contrast to that place,) there is no tiger in Taiwan."

Both of the above sentences are infelicitous when they are used out of the blue.

Following this, we may ask whether there is more difference between a conjunct led by *ah* (啊) and a self-standing sentence following *ah* (啊).

By carefully examining the apparent self-standing initial-*ah* (啊) sentences, we see that they require extra licensing. See the contrast in the examples that follow.

(12) A: Beh tshut-khì tshit-thô --ooh? (TSM)
will go.out have.fun PRT
欲 出去 迌迌 喔
"Are you going out?"
B: Hènn --ah, kin-á-ji̍t tsin hó-thinn.
yes PRT today very sunny
Hènn 啊 今仔日 真 好天
"Yup. It is sunny today."

(13) Context: A and B encounter each other in a park in the morning.
A: Gâu-tsá! (TSM)
good.morning
爻早
"Good morning."
B: Gâu-tsá!
good.morning
爻早
"Good morning."
A: Ah kin-á-ji̍t tsin hó-thinn *(--neh).
AH today very sunny PRT
啊 今仔日 真 好天 *(呢)
"(Unlike some people have predicted / unlike the gloomy weather that we have endured…,) it is sunny today."

The sentence from B in (12) shows that *kin-á-ji̍t tsin hó-thinn* (It is sunny today) is a sentence that can stand alone. Interestingly, in a self-standing initial *ah* (啊) sentence such as the last sentence in (13), the sentence-final particle *neh* (呢) becomes indispensable.

In addition to the particle *neh* (呢), there are other ways to make a self-standing initial *ah* (啊) sentence felicitous:

(14) Context: A and B encounter each other in a park in the morning.

A: Gâu-tsá! (TSM)
good.morning
交早
"Good morning."

B: Gâu-tsá!
good.morning
交早
"Good morning."

A-1:* Ah kin-á-jit tsin hó-thinn.
AH today very sunny
啊 今仔日 真 好天
(Intended) "(Unlike some people have predicted / unlike the gloomy weather that we have endured…,) It is sunny today."

A-2: Ah kin-á-jit tsin hó-thinn --neh.
AH today very sunny PRT
啊 今仔日 真 好天 呢
"(Unlike some people have predicted / unlike the gloomy weather that we have endured…,) It is sunny today."

A-3: Ah kin-á-jit ē kui-kang hó-thinn bē?
AH today will all.day sunny Q
啊 今仔日 會 規工 好天 袂
"Will it be sunny all day today?"

A-4: Ah lí beh khì tó-uī?
AH you will go where
啊 你 欲 去 佗位
"Where are you going?"

A-5:* Ah lí sing kiânn, guá teh tán lâng.
AH you firstly go I PROG wait person
啊 你 先 行 我 咧 等 人

"You go first. I'm waiting someone."

A-6:* Ah lán lâi khì hia tsē.
AH we come go there sit
啊 咱 來 去 遐 坐
"Let's go there and sit down."

As shown in (14) A-3 to A-4, the interrogative can license a self-standing initial *ah* (啊) sentence in addition to the sentence-final particle *neh* (呢), as shown in the reproduced sentence in A-2; the imperative / hortative cannot do so.[73]

The lack of licensing power from the imperative / hortative can be demonstrated in some other examples:

(15) A: A-bú, ū tsuâ! (TSM)
mom have snake
阿母 有 蛇
"Mom, there's a snake!"

B-1:* Ah kín tsáu!
AH quickly run
啊 緊 走
(Intended) "Run away quickly!"

B-2: Ah (lí) koh m̄ kín tsáu?
AH you still NEG quickly run
啊 你 閣 毋 緊 走
"Why don't you leave as soon as possible?"

(16) A: Guá ê sann iáu tshî-tshî. (TSM)

[73] Wei-Cherng Sam Jheng and Ching-yu Helen Yang point out that the sentence-final *ah* (啊) with a high level tone can license an imperative that begins with a sentence-initial *ah* (啊), exemplified in the following:

(i) Ah lí sing kiânn --ah[55]? (TSM)
AH you firstly go SFP
啊 你 先 行 啊
"Why don't you go first? (After you.)"

I agree with them that the speech-act of (i) is imperative, whereas the sentence is interrogative with regard to its clausal type. In cases of this kind, a sentence-final *ah* (啊) with a high level tone makes the sentence a question. This is not a new observation of the sentence-final *ah* (啊); in fact, some researchers, such as Chen (1989) and Tin (1934), suggest that the sentence-final *ah* (啊) can be used as a question particle.

I POSS clothes still moist

我 的 衫 猶 溼溼

"The laundry is still moist."

B-1:* Ah kā ke hang --sann-tsa̍p -hun-á.

AH DISP additional heat thirty minute-DMT

啊 共 加 烘 三十 分仔

(Intended) "Put the drier on for 30 minutes more."

B-2: Ah (lí) bē-hiáu kā ke hang

AH you not.know.how DISP additionally heat

啊 你 袂曉 共 加 烘

--sann-tsa̍p -hun-á?

thirty minute-DMT

三十 分仔

"Don't you know that you can dry it for another 30 minutes or so?"

Sentences B-1 and B-2 in (15) and (16) are both directive in their speech-act, but they differ in their sentence force. Only the interrogative sentences in B-2 are legitimate, contrary to B-1's imperative sentences.

Aside from the sentence force, it is noteworthy that not all sentence-final particles are licensers. In the examples below, I replace the particle *neh* (呢) with other sentence-final non-question particles:[74]

(17) Context: A and B encounter each other in a park in the morning.

A: Gâu-tsá! (TSM)

good.morning

爻早

"Good morning."

B: Gâu-tsá!

good.morning

爻 早

"Good morning."

A-1:* Ah kin-á-ji̍t tsin hó-thinn --koh.

[74] Remember that we have already seen that the interrogative force licenses self-standing initial *ah* (啊) sentences. Therefore, question particles are excluded in this test.

AH today very sunny PRT

啊 今仔日 真 好天 閣

(Intended) “(Unlike the bad weather we just endured / contrary to expectation…) it is sunny today (and why don’t you…)”

A-2:* Ah kin-á-jit tsin hó-thinn --ah[33/55].

AH today very sunny PRT

啊 今仔日 真 好天 啊

(Intended) “(Unlike the bad weather we just endured / contrary to expectation…) it is sunny today, obviously.”

A-3:* Ah kin-á-jit tsin hó-thinn --ê.

AH today very sunny PRT

啊 今仔日 真 好天 的

(Intended) “(Unlike the bad weather we just endured / contrary to expectation…) it is sunny today.”

A-4:* Ah kin-á-jit tsin hó-thinn --lah.

AH today very sunny PRT

啊 今仔日 真 好天 啦

(Intended) “(Unlike the bad weather we just endured / contrary to expectation…) it is sunny today.”

A-5:* Ah kin-á-jit tsin hó-thinn --looh.

AH today very sunny PRT

啊 今仔日 真 好天 囉

(Intended) “(Unlike the bad weather we just endured / contrary to expectation…) it is sunny today.”

A-6:* Ah kin-á-jit tsin hó-thinn --nooh.

AH today very sunny PRT

啊 今仔日 真 好天 nooh

(Intended) “(Unlike the bad weather we just endured / contrary to expectation…) I don’t even doubt that it is sunny today.”

A-7: Ah kin-á-jit tsin hó-thinn --oô.

AH today very sunny PRT

啊 今仔日 真 好天 喔

“(Unlike the bad weather we just endured / contrary to expectation…)

you should notice that it is sunny today."

A-8: Ah kin-á-ji̍t tsin hó-thinn kong.
AH today very sunny PRT
啊 今仔日 真 好天 講
"(Unlike the bad weather we just endured / contrary to expectation…) it is sunny today (and I suppose this is a new information to you)."

A-9: Ah kin-á-ji̍t tsin hó-thinn --liòo.
AH today very sunny PRT
啊 今仔日 真 好天 liòo
"(Unlike the bad weather we just endured / contrary to expectation…) See! It is sunny today."

A-10: Ah kin-á-ji̍t tsin hó-thinn --lih.
AH today very sunny PRT
啊 今仔日 真 好天 哩
"(Unlike the bad weather we just endured / contrary to expectation…) we cannot neglect that it is sunny today."

A-11: Ah kin-á-ji̍t suah tsiah hó-thinn.
AH today unexpectedly so sunny
啊 今仔日 煞 遮 好天
"(Unlike the bad weather we just endured / contrary to the expectation…) it is sunny unexpectedly."

Among these particles, except for the aforementioned *neh* (呢), only *ooh* (喔) with a rising tone, *kóng* (講), *liòo*, *lih* (哩), and *suah* (煞) buttress the sentence pattern in question.

Now, let's go back to the cumulative and illative conjuncts, the two kinds incompatible with an initial *ah* (啊). In fact, it is not impossible to rescue them from being ruled out. Here are some examples:

(18) a. Tsuí-sūn tsú tsia̍h, ah Gîn-khuân *(**ū**) piànn tshù-lāi, ah
Tsuisun cook food AH Ginkhuan ASS clean house-inside AH
水順 煮 食， 啊 銀環 有 摒 厝內， 啊
Khìng-î *(**mā**) tàu kòo tiàm. (TSM; cumulative)
Khingi also help look.after shop

慶餘　　嘛　門　顧　　店

"Tsuisun cooks, and Ginkhuan cleans the house, and Khingi helps manage the store."

b. Guā-kháu thinn-khì tsiah-nī hó, ah lán *(to)
outside weather so good AH we FOC
外口 天氣 遮爾 好 啊 咱 都
îng-îng bô tāi-tsì tsò, ah lí *(koh) tsē bē
unoccupied no thing do AH you additionally sit NEG
閒閒 無 代誌 做 啊 你 閣 坐 袂
tiâu…
steady
牢

"The weather is agreeable, and we have nothing to do, and you don't want to sit all day…"

c. Tsuí-sūn sī tsái-khí beh lâi, ah Gîn-khuân sī
Tsuisun FOC morning will come AH Ginkhuan FOC
水順 是 早起 欲 來 啊 銀環 是
e-poo, ah Khìng-î sī bîn-á-tsài.
afternoon AH Khingi FOC tomorrow
下晡 啊 慶餘 是 明仔載

"It is in the morning that Tsuisun will come, and it is in the afternoon that Ginkhuan will come, and it is tomorrow that Khingi will come."

(19) Bîn-á-tsài beh lo̍h-hōo --ah, ah in-uī hong-bīn (TSM; illative)
tomorrow will rain ASP AH because cold.front
明仔載 欲 落雨 矣 啊 因為 峰面
lâi --ah --lih.
come ASP PRT
來 矣 哩

"It will rain tomorrow, because (you should have known that) a cold front is coming."

With the help of adverbials such as the assertive marker *ū* (有), the additive *mā* (嘛) and *koh* (閣), the focus particles *to* (都) and *sī* (是), and the sentence-final particle *lih*

(哩), we see that the acceptability of initial *ah* (啊) in cumulative conjuncts is notably improved.

Lastly, the sentence-initial *ah* (啊) cannot be embedded in a subordinate clause, as shown in the following:

(20) * Tsuí-sūn hi-bāng ah kin-á-jit tsin hó-thinn. (TSM)
Tsuisun hope AH today really sunny
水順 希望 啊 今仔日 真 好天
(Intended) "Tsuisun hopes that it's sunny today."

To sum up, an initial *ah* (啊) occurs in either a self-standing sentence incompatible with any conjunction words or as a conjunct in a sentence in which the conjunction word is optional. In the former case, the sentence has to either be in the interrogative force or be attached with some specific sentence-final particles; in the latter, cumulative and *because*-illative conjuncts require extra adverbials to be legitimate.[75]

These observations are summarized in the following table: [76]

[75] At this point, I have no answer as to why a *therefore*-illative by itself can license a sentence-initial *ah* (啊) and must leave it for future research.

[76] I have not depleted all of the possible licensing conditions of the element in question; the point is clear that this element cannot be followed by a plain sentence, even though the plain sentence by itself is grammatical and infelicitous in the same context. Below are some more overheard acceptable examples with a sentence-initial *ah* (啊) that are not included in the discussion. The elements relevant to licensing in them are in boldface. Though it is vital to address them one by one to bring about some much needed clarity and transparency, it lies outside the immediate scope of this dissertation to undertake such a task.

i) Ah tse **m̄** khah kán-tan.
AH this NEG more easy
啊 這 毋 較 簡單
"(Contrary to what you think,) this is too easy!"

ii) Ah tse tsiah kán-tan **--tio̍h**.
AH this so easy PRT
啊 這 遮 簡單 著
"(Unlike what you think,) this is so easy."

iii) Ah in **lóng** teh tshit-thô khah tsē --lah.
AH they all PROG play more many PRT
啊 伊 攏 咧 迢迢 較 濟 啦
"(In contrast to those people we know,) they spend most of their time in playing."

iv) Ah sàu-tshiú-tshinn **to** ē lak --lo̍h-lâi --ah, **sī-án-tsuánn** thinn bē pang?
AH comet even.also will fall down-come PRT why sky NEG collapse
啊 掃帚星 都 會 落 落來 矣 是按怎 天 袂 崩
"(More than we can imagine,) even a comet may fall down, how come you say the sky will never collapse?"

(21)

Licensing condition	1. In a question 2. Attached with a SFP like *neh* (呢), *ôo* (喔), *liòo*, *lih* (哩), or *kóng* (講). 3. Added with an intra-sentential adverb like *suah* (煞) "surprisingly," or assertive, additive, or focus adverbials such as *ū* (有), *mā* (嘛), *koh* (閣), *to* (都), and *sī* (是). 4. Accompanied by an alternative and illative conjunct, such as *m̄-koh* (毋過) "but," *sóo-í* (所以) "therefore," *iah-sī* (抑是) "or," and *nā bô* (若無) "otherwise."

5.3 A preliminary description, its etymology and near counterparts

So far, we have looked into the distribution of the sentence-initial *ah* (啊) and its licensing conditions. In this section, we will turn to its denotation and etymology, followed by comparing it with some near counterparts in other languages.

5.3.1 Its function and presumable origin

According to the online dictionary compiled by the Ministry of Education, ROC (Taiwan), the sentence-final particle *ah* (啊) is used to indicate the end of either the utterance or a topic. When it occurs sentence-initially, it sometimes also signifies a topic, and sometimes it functions as a transitional word.[77]

Putting aside topic signifying, remember that the initial *ah* (啊) occurs either in a self-standing sentence or with a conjunction word in a conjunct. When the initial *ah* (啊) is in a conjunct, the accompanying conjunction can be adversative, alternative, illative, or cumulative, and only the last two kinds require additional licensers. That is to say, the element *ah* (啊) itself does not determine the type of conjoining constructions; therefore, the tone of the conjunct cannot come from *ah* (啊) but from the conjunction word, either overtly spelled out or omitted. Compare the instance sentence from the online dictionary, with the MC translation provided in the same entry:

[77] The hyperlink: http://twblg.dict.edu.tw/holodict_new/result_detail.jsp?n_no=7043&curpage=1&sample=%E5%95%8A&radiobutton=1&querytarget=1&limit=20&pagenum=1&rowcount=2 (Retrieved on February 21, 2017). The function of the initial *ah* (啊) is described in MC as follows: '用於表示提起主題或轉折語氣.'

(22) a. Ah to i m̄ lâi, guán tsiah ē khiàm tsi̍t ê
AH PRT he NEG come we PRT would lack one CL
啊 都 伊 毋 來 阮 才 會 欠 一 个
lâng. (TSM; example sentence of *ah* in the online dictionary of MOE)
person
人
"It's because of his absence that we are short a person."

b. Dōu shì yīnwèi tā bù lái, wǒmen cái huì
PRT be because he NEG come we PRT would
都 是 因為 他 不 來 我們 才 會
quē yí ge rén. (MC; from the entry of *ah ibid.*)
lack one CL person
缺 一 個 人
"It's because of his absence that we are short a person."

(23) Ah to in-uī i m̄ lâi, guán tsiah ē khiàm tsi̍t
AH PRT because he NEG come we PRT would lack one
啊 都 因為 伊 毋 來 阮 才 會 欠 一
ê lâng. (TSM)
CL person
个 人
"It's because of his absence that we are short a person."

Unlike the exemplifying sentence in (22)a, the connective word *yīnwèi* (因為) is inserted into the corresponding translation in (22)b. This connective's counterpart can be inserted into the TSM instance without a problem and without altering the meaning of the sentence, as shown in (23). All of this tells us that *ah* (啊) cannot be a transferring word, contrary to what is suggested in the online dictionary. The transferring sense is contributed by the conjunction word; be it adversative, alternative, or illative, *ah* (啊) can fit into the sentence, for *ah* (啊) itself does not contribute to the transferring connotation, which should attribute to the conjunction word, whether it is overt or covert.

With the transferring function excluded, based on the same dictionary, we are left with the other choice: signifying a topic. Our questions are: what does it mean to say that initial *ah* (啊) signifies a topic? In other words, what is it and what does it do? Moreover, what do these facts have to do with its licensing conditions?

Apart from its affixal and intra-sentential occurrences, Li (1997) also notices the sentence-initial 阿 in Middle Chinese Bianwen (變文) data. In these examples, 阿 is followed by either a noun referring to a person or a pronoun. According to Li, a sentence-initial 阿 marks the whole sentence with the interrogative force and, in some cases, also with a transferring sense. He suggests that this usage resulted from Sanskrit syntax's influence, in which the interrogative pronoun occurs in the beginning of a sentence.

It is intriguing that, as seen in the last section, one of the typical environments where initial *ah* (啊) appears in TSM is the interrogative.

Here are two examples listed in Li (1997:37):

(24) a. 阿 你 更 擬 向 何處 覓 去[78] (Bianwen)
PRT you further plan towards where look.for go
"Where are you still going to look for it?"

b. 阿 你 今時 盡 說 我 修行 作 佛，
PRT you now all say I religious.practice be Buddha
且 作 摩生 修行[79]
temporarily do what religious.practice
"You keep on saying that you are practicing religiously to become a Buddha. What practice do you do?"

As evidence supporting his analysis of the origin of 阿 from a Sanskrit *wh*-pronoun, Li further points out the existence of 無 and 何, which are variants of 阿, as illustrated below:

(25) a. 師 云： 無 這個 來 多少 時[80] (Bianwen)
master say PRT this come how.much time

[78] Cited from *Gǔzūn Sùyǔlù* (古尊宿語錄; Recorded Sayings of the Ancient Venerable).
[79] Cited from *Zǔtáng Jí* (祖堂集; Anthology from the Halls of the Patriarchs).
[80] Cited from *Zǔtáng Jí* (祖堂集; Anthology from the Halls of the Patriarchs).

"The master asked: 'How long has this been here?'"

b. 佛 告 須菩提 于 汝 意 云： 何 我 眾生
Buddha say Subhuti about you opinion say PRT I all.lives
壽命 法 可 得 不[81]
life way can obtain NEG

"Buddha asked Subhuti to give his opinion on the question: Can the beings obtain the way to lengthen their lifespan from me?"

According to Li, the existence of variants as the products of homophonic translation of the syllable *a* or *au* in Sanskrit proves his conjecture on the Sanskrit *wh*-pronominal origin, from which the sentence-initial 阿 comes.

Apart from the influence of homophonic translation, *wh*-nominals in Sinitic languages have been noted to be used in several different ways. As pointed out by researchers, *wh*-nominals in MC can be interpreted with either an interrogative or a non-interrogative reading (Huang 1982; Li 1992; Aoun & Li 1993). Tsai (1999a, b) further assumes that the usage of a *wh*-nominal is determined by the null operator, with or without a [+Q] feature and base-generated in Spec.CP. When the [-Q] feature is contained in the null operator, a topic-comment or a relative construction would be constructed.

Nonetheless, *wh*-nominals are more than indefinites; it has been long pointed out that *wh*-elements, which are apparently nominal, can occur as adjuncts (e.g., Chao 1968; Shao & Zhao 1989; Shao 1996; Ochi 2004; Obenauer 2006; Tsai 2011; Pan 2014; Endo 2015; Wang 2016; Yang 2016). See the following example, which is example (15) from (Tsai 2011:5):

(26) a. Ākiū nǎlǐ qù-le Běijīng! Tā gēnběn méi qù. (MC)
Akiu where go-ASP Beijing he at.all NEG go
阿 Q 哪裡 去了 北京 他 根本 沒 去

"How come you said that Akiu went to Beijing? He didn't go there at all."

b. Ākiū shème qù-le Běijīng! Tā gēnběn méi qù.
Akiu what go-ASP Beijing he at.all NEG go

[81] Cited from the Middle Chinese translation of *Dàzhìdùlùn* (大智度論; Great Treatise on the Perfection of Wisdom) by Kumārajīva.

阿 Q 什麼 去了 北京 他 根本 沒 去

“How come you said that Akiu went to Beijing? He didn’t go there at all.”

According to Tsai (2011), *nălĭ* (哪裡; “where”) and *shéme* (什麼; “what”) in these sentences are instances of lexicalization and are employed as adjunct. In these cases, they convey exclamation from disapproval.

Wh-nominals can even occur initially as a predicate. The sentences below are also from Tsai (2011:5 (16b) and (17)):

(27) a. Shéme… nî bù xiāngxìn wǒ?! (MC)
what you NEG believe me
什麼 你 不 相信 我
“What?! You don’t believe me?”

b. A: Níng yì-tóu cháng fă shì zhēn piàoliàng!
you one-CL long hair be really beautiful
您 一頭 長 髮 是 真 漂亮
“You have long and beautiful hair.”
B: Nălĭ, nălĭ…
where where
哪裡 哪裡
“I am flattered.”

In (27)a, the *wh*-word *shéme* (什麼; “what”) expresses the emotion from the speaker that he can hardly accept something unexpected. As for (27)b, *nălĭ* (哪裡; “where”) has nothing to do with questioning the location; instead, it is used to deny the compliment from A, to show her humility.

Last but not least, the initial *shéme* can even be used in the following way without the intervening pause (refer to Shao 1996 and Tsai 2011):

(28) Shéme Ākiū qù-le Bālí? Tā xiànzài rén zài Nántè. (MC)
what Akiu go-ASP Paris he now person in Nantes
什麼 阿 Q 去了 巴黎 他 現在 人 在 南特
“It is impossible for Akiu to have gone to Paris. He is in Nantes right now.”

Again, this *wh*-expression does not have the usual interrogative or indefinite interpretations but instead has a construal parallel to negative epistemic modality (Tsai 2016).

In summary, one of the possible origins of the sentence-initial *ah* (啊), assuming its root is in Middle Chinese, is the homophonic translation of Sanskrit initial *wh*-pronouns. Compared to the prevalent non-interrogative and adjunct usages of *wh*-nominals, its development from the homophonic Sanskrit loanword into a specific discourse connective and an interrogative marker at the beginning of a sentence should not be surprising.

Due to its sentence-initial distribution pattern, we may tentatively label the sentence-initial *ah* (啊) as an introductory element (fāyǔcí; 發語詞). We will compare it with other similar elements, to define it more explicitly.

5.3.2 Its near counterparts

In Old and Middle Chinese, introductory elements are common. For instance, in *Shījīng* (the Book of Songs; 詩經), 維 is frequently employed to lead a sentence. It can indicate the cause of an action or a behavior, introduce a topic, or introduce a temporal phrase. Aside from the introductory usage, the sentence-initial 維 can also be a pronoun or a presupposition and refers to a previously mentioned noun or a cause (Lü 2007).

Undeniably, there are similarities between the introductory elements in Old and Middle Chinese and the sentence-initial *ah* (啊) in TSM. Take another introductory element, 夫, for example. According to the dictionary *Jiàoyùbù Chóngbiān Guóyǔ Cídiǎn Xiūdìngběn* (教育部重編國語修訂本), 夫 in Old Chinese can occur sentence-finally or intra-sentential, in addition to its sentence-initial usage as an introductory element, just like *ah* (啊) in TSM. Also, 夫 can be employed as a pronoun; if a sentence-initial *ah* (啊) originated as a *wh*-pronoun, per the previous subsection we then have another shared attribute.[82]

Remember the licensing conditions of an initial *ah* (啊), which were summarized in (21): the element in question cannot be a vacuous and insensitive

[82] The page of 夫 is at http://dict.revised.moe.edu.tw/cgi-bin/cbdic/gsweb.cgi?o=dcbdic&searchid=W00000001776. Retrieved on Mar. 10, 2017.

dummy word, given its placement at the beginning of the sentence. Even though we have no idea of and no way to look into Old Chinese's and Middle Chinese's introductory element licensing conditions and requirements because of their native speakers' extinction, it is still possible to show that the item in question is different from those introductory elements. Compare the two sentences below:

(29) 夫　天地　者，萬物　之　逆旅。　（Middle Chinese）
IE　sky.land　NMLZ　everything　LK　guest-house
"The world is the guest-house of everything."

(30) Without a context; out of the blue.
Ah thinn tshī lâng puî-tsut-tsut, lâng tshī lâng tshun tsit ki kut.
AH sky feed person very.fat person feed person be.left one CL bone
啊 天 飼 人 肥 tsut-tsut 人 飼 人 賰 一 枝 骨
(TSM)
"The Nature can nourish people so well; whereas, human beings usually fail to provide those of their species with enough food."

The sentence in (29) is the first sentence of the essay, 春夜宴桃李園序, by Li Bai. Its standing at the beginning of the very first sentence of an essay indicates that 夫 can be used out of the blue. However, without a context, the TSM sentence led by *ah* (啊) in (30) is infelicitous. This contrast suggests that, unlike the introductory element 夫, a sentence-initial *ah* (啊) cannot be severed from a context.

To say that this element requires a context does not mean that it cannot initiate a conversation. The context can be silent without a linguistic antecedent, so long as it is perceived by the participants in it. Here is an example:

(31) Context: A saw B coming up alone, and A said to B:
A: Ah lín kiánn bô puê lí tshut-lâi kiânn --ooh? (TSM)
AH your son NEG accompany you go.out walk PRT
啊 恁 囝 無 陪 你 出來 行 喔
"(Not as usual,) didn't your son come out with you?"

Even though the sentence in (31) is the first one spoken between A and B during their encounter, the sentence can be acceptable as long as A and B meet each other frequently and B has been usually accompanied by his son.

Based on this observation, context sensitivity has to be added into the licensing conditions of sentence-initial *ah* (啊).

Now let's compare this element with some similar items.

In the literature, MC also has an introductory element, *huàshuō* (話說). According to Zhou 2012, *huàshuō* (話說) should be considered with two distinct usages, according to the chronological order in which they emerged. The first usage is the one frequently used in novels written in early MC (*huàshuō1*), and the second usage is a new one that emerged on the internet in this decade (*huàshuō2*).

Huàshuō1 is a discourse marker that introduces or shifts a topic in an objective narrative. This usage is usually at the very beginning of a book, chapter, or new paragraph, and therefore the information that follows it has never been mentioned previously. In addition, only declaratives can be preceded by this marker.

In contrast, *huàshuō2* is more flexible with regard to its positions and the pursuing sentence type. Unlike *huàshuō1*, *huàshuō2* can, like a connective, show up at the beginning of a clause, after an antecedent one, and it can precede many sentence types, including declaratives, interrogatives, and exclamatives. However, Zhou points out that both of these usages introduce are new information, and that *huàshuō2* has additional pragmatic connotations, including being an attention-seeker and a tone softener.

The use of *wa* in Japanese literature has long been the focus of many researchers, and recently, a sentence-initial colloquial usage of *wa* has attracted some attention. Based on the observations in Yoshida 2004 and Arita 2005 and 2009, Nasu looks further into the colloquial usage of the topic marker *wa* and asserts that this usage should not be considered only a conflation with *wa* marking a covert topic. The examples below illustrate the topic noun attached by *wa* in (32)Ba, with a covert topic in (32)Bb and the construction in question, the so-called topic particle stranding (TPS) in (32)Bc.

(32) A: Keetai-wa dono kisyu-ga hayatteru no? (Japanese)
mobile-TOP which machine-NOM popular Q
"Speaking of mobiles, which machines are popular?"
Ba: Keetai-wa Sony-no kisyu-ga hayattemasu.
mobile-TOP Sony-GEN machine-NOM popular

"Speaking of mobiles, Sony's machines are popular."

Bb:	Ø	Sony-no	kisyu-ga	hayattemasu.
	Ø	Sony-GEN	machine-NOM	popular
Bc:	Ø-wa	Sony-no	kisyu-ga	hayattemasu.
	Ø-TOP	Sony-GEN	machine-NOM	popular

TPS behaves like standard topicalization: even when the topic phrase is a clausal constituent, the topic does not have to be syntactically identified with an element in the preceding utterance. In some cases, the felicitous overt topic must be a pronoun that cannot be interpreted as referring to a specific constituent of an earlier utterance; rather, its reference is indirectly determined by inference from the preceding context. In (32), the preceding question is taken as a whole and as the topic of the current utterance, and the connotation of the TPS in (32)Bc is something similar to "Speaking of the question, the answer is…."

Interestingly, though TPS looks similar to topicalization in terms of interpretation, the construction, just like sentence-final particles and our element in question, the sentence-initial *ah* (啊), is strictly limited to root contexts (cf. (20)). Nash suggests that TPS occurs in a projection that is located higher than TopP and that constitutes the outermost periphery of the CP zone, which is only available in root clauses.

In addition to the syntactic differences between TPS and common topics, TPS is equipped with extra pragmatic functions. TPS is canonically found in the context of dialogues. Non-dialogic contexts such as narratives exclude it; in other words, TPS fulfills an interpersonal function. More specifically, TPS occurs exclusively in replies to questions and takes place only when the speaker is qualified as a knowledge-holder; this includes the connotation "I (am going to) reply to you" (2012:220). In this respect, TPS is similar to a performative verb.

Based on Speas and Tenny (2003)'s scheme, in which the pragmatic notions such as "speaker" and "addressee" are represented, Nasu (2012) proposes an analysis for TPS. However, he does not agree with Speas and Tenny's characterization of the SA phrase as Rizzi (1997)'s ForceP. Moreover, Nasu believes that Speas and Tenny's proposal fails to predict the non-involvement of speaker–addressee interaction in

monologues. Therefore, he revises their scheme; his analysis of TPS is shown in (33), which is applied to (34)a to render the structure in (34)b:

(33) [$_{saP}$ (Ø-wa:) [$_{sa'}$ SPEAKER [$_{sa'}$ [$_{sa*P}$ [$_{ForceP}$ …][$_{sa*'}$ ADDRESSEE sa*^{0}]] sa^0]]]

(34) a. Ø-wa: Sony-no kisyu-ga hayattemasu. (Japanese)
Ø-TOP Sony-GEN machine-NOM popular

b. [$_{saP}$ Ø$_i$-wa: … [$_{ForceP}$ [$_{TopP}$ *pro*$_i$ [$_{Top'}$ [Sony-no kisyu-ga hayattemasu] Top^0]] Force^0] … sa^0]

In Nasu's analysis, the stranded particle is located in Spec-saP. To explain the fact that TPS is characterized as a topicalization subtype due to the interpretative equivalence of TPS and topic structures, Nasu suggests that TopP hosts a null pronoun *pro* in its specifier position, which is licensed as a topic by the Top head in the Spec-Head structure; this null pronoun is bound by the stranded particle. Through the link resulting from this binding relation, the particle indirectly takes on the status of topic.

Nasu's work has incorporated certain pragmatic factors into syntax and is a revision of Speas and Tenny (2003)'s, and we will refer to his proposal in our analysis of the sentence-initial *ah* (啊).

Also occurring sentence-initially and being context sensitive, the English *so*, when used as a discourse marker, is worthy of notice for the several attributes it shares with the sentence-initial *ah* (啊).

Researchers have different proposals for *so*. For example, Schiffrin (1987:223) suggests that *so* is used to instruct the hearer to recover a conclusion (an inference or a claim) that has already been presented or is otherwise mutually known. In a comprehensive review complemented with new findings, Müller 2005 identifies fourteen functions of *so*, including both non-discourse and discourse marker uses.[83] The discourse marker functions are divided into those that work at the textual level and those that work at the interactional level, as shown in the table below (summarized from Müller 2005:68, Table 2.1, and the discussion follows it):

[83] Non-discourse marker functions include: adverb of degree or manner, expressing purpose, *so* in fixed expressions, direct translations of a German expression, and *so* as a substitute.

(35) Discourse marker functions of *so*

Textual level	
function	**description**
• Marking result or consequence	By using it, the speaker, on the one hand, helps the hearer to arrive at an interpretation, and on the other hand, makes it clear that he/she intends this interpretation.
• Main idea unit marker	This is used when the speaker comes back, after a digression or explanation, to the main thread of the narrative or to a topic or an opinion previously mentioned and then repeats or alludes to this main idea.
• Summarizing/rewording /giving an example	The utterance following it expresses the same propositional idea as a previous utterance.
• Sequential *so*	This introduces the next event in a series of events, or introduces the next part of the story.
• Boundary marker	This is a boundary marker between types of talk: instructions and the beginning of the narrative. They are not relevant to propositional ideas, and only structure spoken material into types of speech.
Interactional level	
function	**description**
• Speech act marker - question or request	This prefaces other speech acts, such as requests or questions.
• Speech act marker - opinion	This introduces an expression of his/her opinion.
• Marking implied result	This conveys a "result" meaning, even if no result follows, indicating that a speaker has reached a point in the presentation of his/her ideas at which a hearer can infer what would come next, even if it is not explicitly stated.
• Marker of a transition relevance place	This indicates that the speaker turns the floor over to the partner again.

According to Müller (2005:89), when *so* is employed at the textual level, it marks propositions as the result or consequence of previously uttered propositions and leads back from a digression to a story's main thread or to an argument's main idea. On the other hand, it may also be used to sum up a description of a scene or an opinion, put

the description or opinion into different words, or give an example. Additionally, *so* effects transitions in the narrative from one scene to the next and marks the boundary between different text types.

As for its use at the interactional level, *so* may function as a marker of speech acts such as requests, questions, and expressions of opinion, or it may imply a result (Müller 2005:89).

At first glance, the conjunct type of sentence-initial *ah* (啊) seems to correspond to *so* at the textual level and the self-standing type to *so* at the interactional level. Nevertheless, remember that the sentence-initial *ah* (啊) does not contribute to the transferring connotation, which should attribute to the conjunction word, whether overt or covert. That is to say, the conjunct type *ah* (啊) is more like a purified textual *so* without any specific transferring readings. With the interactional *so* and the self-standing sentence-initial *ah* (啊), on the other hand, the latter's usage is more restricted than the former's; this can be demonstrated by occurrences of *so* which cannot be replaced by *ah* (啊) in their parallel TSM examples:

(36) a. Son: My clothes are still wet. (Müller 2005:63 (11) citing from Fraser 1990)
Mother: *So* put the drier on for 30 minutes more.

b. Teenage son: The Celtics have an important game today.
Disinterested parent: *So*?

c. [Grandmother to granddaughter] *So* tell me about this wonderful young man you're seeing.

(37) a. Son: Guá ê sann iáu tshî-tshî. (TSM)
I POSS clothes still moist
我 的 衫 猶 滭滭
"The laundry is still moist."

Mother 1:* Ah kā ke hang --sann-tsa̍p -hun-á.
AH DISP additional heat thirty minute-DMT
啊 共 加 烘 三十 分仔
(Intended) "Put the drier on for 30 minutes more."

Mother 2: Ah (lí) bē-hiáu kā ke hang
AH you not.know.how DISP additionally heat

啊　你　袂曉　　共　加　　烘

--sann-tsa̍p -hun-á?

thirty　minute-DMT

三十　分仔

“Don’t you know that you can dry it for another 30 minutes or so?”

b. Teenage son: Nike tshut tsi̍t siang ê-á tsiok phānn tsiok

Nike out one CL shoe very fashionable very

Nike 出　一　雙　鞋仔　足　奓　足

suí --neh.

婿　呢

“Nike has released a pair of fancy and pretty shoes!”

Parent 1: * Ah?

AH

啊

(Intended) “So?”

Parent 2: Ah án-tsuánn?

AH how

啊　按怎

“So?”

Parent 3: Ah sóo-í --leh?

AH therefore PRT

啊　所以　咧

“So?”

c. [Grandmother to granddaughter]

Ah kā guá kóng tsi̍t-kuá lín lâm-pîng-iú ê

AH GOAL me say some your boyfriend LK

啊　共　我　講　一寡　恁　男朋友　的

tāi-tsì *(kám hó?)

thing Q good

代誌　敢　好

“So tell me something about your boyfriend.”

The contrast between the English (36) and the TSM (37) is not surprising, for we have already learned previously that there are licensing conditions to be fulfilled for the sentence-initial *ah* (啊) (see (21)). In these two sets of sentences, the only thing new to us is that, unlike *so*, the sentence-initial *ah* (啊) cannot be used alone (compare (36)b with (37)b).[84]

The licensing requirements of *ah* (啊) can be further illustrated with the following examples:

(38) Context: Speaker A comes home laden with parcels, and speaker B comments:
B: So, you've spent all your money. (Blakemore 1988:188f)

(39) Context is the same as in (38). (TSM)

B-1:* Ah lí tsînn lóng khai ta --ah.
AH you money all spend dry ASP
啊 你 錢 攏 開 焦 矣
(Intended) "So, you've spent all your money."

B-2: Ah lí tsînn lóng khai ta --ah sìm?
AH you money all spend dry ASP TAG
啊 你 錢 攏 開 焦 矣 是毋
"So, you've spent all your money, right?"

B-3: Ah lí tsînn lóng khai ta --ah buē?
AH you money all spend dry ASP Q
啊 你 錢 攏 開 焦 矣 未
"So, have you spent all your money?"

B-4: Ah lí tsînn lóng khai ta --ah ôo.[85]
AH you money all spend dry ASP PRT
啊 你 錢 攏 開 焦 矣 喔
"So, you've spent all your money."

B-5: Ah lí tsînn lóng khai ta --ah --neh.
AH you money all spend dry ASP PRT
啊 你 錢 攏 開 焦 矣 呢

[84] Do not confuse this *ah* (啊) with the interjection *ah* (啊); the former is spoken with a high, level tone, and the latter is spoken with a low, short tone.
[85] Note that the sentence-final particle here is spoken with a rising tone.

"So, you've spent all your money."

The *so* that leads the sentence in (38) brings forth a construal that the following utterance is relevant to the situational context; this is an example reminiscent of (31). Though these two items look similar in their usages, unlike *so*, the acceptance of *ah* (啊) is subject to the forces/mood of the following sentences. It has to be either followed by an interrogative, as in (39)B-2 and (39)B-3, or a declarative attached with specific particles, as in (39)B-4 and (39)B-5. Bare declaratives following *ah* (啊) are infelicitous, as we can see in (39)B-1.

To summarize, the function of the sentence-initial *ah* (啊), when used at the interactional level, is similar to the introductory elements in Middle Chinese and Old Chinese, *wa* in Japanese TPS, and *so* in English. When it is employed at the textual level, *ah* (啊) looks like *so* in English, removed from its transferring sense. Moreover, unlike its near counterparts, we have found strict licensing conditions for *ah* (啊). Subject to these conditions, even though the sentence-initial *ah* (啊) can mostly fit in where its near counterparts are, the sentence that follows it must formally meet some requirements. Moreover, we also found that our element in question cannot occur out of the blue (cf. 夫) and cannot occur alone without a succeeding utterance (cf. *so*). The licensing conditions of the sentence-initial *ah* (啊) is once again updated and repeated below.

(40)

Licensing condition	In a self-standing sentence, the sentence has to be connected with a context appropriately and must also be: 1. A question; or 2. Attached with a SFP like *neh* (呢), *ôo* (喔), *liòo*, *lih* (哩), or *kóng* (講); or 3. Added with an intra-sentential adverb such as *suah* (煞) ("surprisingly"), or assertive, additive, or focus adverbials such as *ū* (有), *mā* (嘛), *koh* (閣), *to* (都), and *sī* (是). In a continuing sentence (preceded by another conjunct), the sentence must be: 1. Accompanied by an alternative and illative conjunct, such as *m̄-koh* (毋過) ("but"), *sóo-í* (所以) ("therefore"), *iah-sī* (抑是) ("or"), and *nā bô* (若無) ("otherwise"). These conjuncts can be omitted in speaking, but they have to be able to be recovered; or 2. Conformant to any one of the three conditions of the self-standing case.

We will now work out its syntax.

5.4 The syntax of the sentence-initial *ah* (啊)

Under the cartographic framework, we will first pinpoint the element in question and will then fine-tune some details, based on its licensing conditions.

Beginning with the highest projection that we know of, we compare the relative positions between the particle in question and the realization of an SA shell, the sequence of "guá leh lí leh" (我咧你咧) studied in chapter 3:

(41) a.	Guá	leh	lí	leh	**ah**	guā-kháu	suah	teh	lo̍h-hōo
	I	LEH	you	LEH	AH	outside	unexpectedly	ASP	rain
	我	咧	你	咧	啊	外口	煞	咧	落雨
	ah.								(TSM)

ASP

矣

"(It's relevant to both you and me. Contrary to what we think,) it is unexpectedly raining outside."

b.* **Ah** guá leh lí leh guā-kháu suah teh lo̍h-hōo

AH I LEH you LEH outside unexpectedly ASP rain

啊 我 咧 你 咧 外口 煞 咧 落雨

ah. (TSM)

ASP

矣

(Intended) "(It's relevant to both you and me. Contrary to what we think,) it is unexpectedly raining outside."

The contrast above indicates that the particle in question is lower than the SA shell.

The two examples below demonstrate the relative positions between the sentence-initial *ah* (啊) and the two focus markers discussed in the previous chapter:

(42) Context: A heard that B just narrowly missed a car that almost bumped into him. And he says to B:

A-1: **Ah** lí **sī** hó-ka-tsài ū tsù-ì --neh, bô,

AH you FOC fortunately have notice PRT otherwise

啊 你 是 好佳哉 有 注意 呢 無

tsit-siann tō tshám --ah. (TSM)

in.this.situation then disastrous PRT

這聲 就 慘 矣

"(Considering the very short reaction time of this kind of things,) it is fortunate for you to have noticed it (and reacted); otherwise, you would be very dead."

A-2: Lí **sī** (***ah**) hó-ka-tsài (***ah**) ū tsù-ì --neh,

you FOC AH fortunately AH have notice PRT

你 是 啊 好佳哉 啊 有 注意 呢

bô, tsit-siann tō tshám --ah.

otherwise in.this.situation then disastrous PRT

無 這聲 就 慘 矣

(43) a. **Ah** lí **sī** kā guá tòng-tsò siánn? (TSM)
AH you FOC DISP I take.as what
啊 你 是 共 我 當做 啥
"(Considering our relationship / my status…,) why do you disregard me to such an extent?"

b.* Lí **sī** **ah** kā guá tòng-tsò siánn?
you FOC AH DISP I take.as what
你 是 啊 共 我 當做 啥

In (42) we see that the particle in question must precede the CVF *sī* (是), and likewise in (43), the particle must occur before the dictum focus *sī* (是).

Putting these together, we then have the following expanded picture of the far left periphery:

(44) [$_{SaP}$ [$_{Sa'}$ ***leh*^{1}** (咧) [$_{SaP}$ [$_{Sa'}$ ***leh*^{2}** (咧) [$_{TopP}$ [$_{Top'}$ ***ah*** (啊)…[$_{FocP}$ [$_{Foc'}$ ***sī*$^{\mathbf{CVF}}$** (是)
[$_{Speech\text{-}actP}$ …[$_{FocP}$ [$_{Foc'}$ ***sī*$^{\mathbf{dictum}}$** (是) [$_{PartP}$ [$_{Part'}$ ***leh*^{3}** (咧) [$_{EvalP}$ [$_{Eval'}$ [$_{EpistP}$ [$_{Epist'}$ …

Based on the skeleton above, we are now in a position to add some flesh to integrate the observations in (40) with the syntactic position of the sentence-initial *ah* (啊).

In (40), we firstly note that this element cannot be used out of the blue; it occurs either in the second conjunct or, when it appears in a self-standing sentence, with a context.. This is reminiscent to TPS in Japanese.

Just as the particle in question cannot be used out of the blue, TPS is canonically found in the context of dialogues. Non-dialogic contexts such as narratives exclude it; in other words, TPS fulfills an interpersonal function, just like the sentence-initial *ah* (啊).

Furthermore, remember that the covert topic in the TPS construction does not have to be syntactically identified with an element in the preceding utterance. When it is realized, it can even be a pronoun that corresponds to no constituent in the earlier preceding utterance. In other words, the topic reference in the TPS construction is indirectly determined by inference from the preceding context. This makes TPS

construction, just like the sentence-initial *ah* (啊), context-dependent; moreover, both of their topic forms are syntactically constrained.

Secondly, neither TPS nor the sentence-initial *ah* (啊) can occur in a non-root environment (refer to (20)).

Starting from this observation, Nash suggests that TPS occurs in a projection that is located higher than TopP, which constitutes the outermost periphery of the CP zone and is only available in root clauses. This is in contrary to topic projection, which can be embedded. Our tests in (41), (42), and (43) also indicate that the sentence-initial *ah* (啊) is structurally high. The syntactic analysis proposed by Nasu is depicted in the following examples:

(45) [$_{saP}$ (Ø-wa:) [$_{sa'}$ SPEAKER [$_{sa'}$ [$_{sa*P}$ [$_{ForceP}$ …][$_{sa*'}$ ADDRESSEE sa*^{0}]] sa^{0}]]]

(46) a. Ø-wa: Sony-no kisyu-ga hayattemasu. (Japanese)
Ø-TOP Sony-GEN machine-NOM popular

b. [$_{saP}$ Ø$_{i}$-wa: … [$_{ForceP}$ [$_{TopP}$ *pro*$_{i}$ [$_{Top'}$ [Sony-no kisyu-ga hayattemasu] Top^{0}]] Force^{0}] … sa^{0}]

In (45), Nasu pinpoints the marker *wa* in TPS under the upper projection of the SA shell; (46)b is the suggested structure for (46)a.

Thirdly, both the sentence-initial *ah* and *wa* in the TPS contribute as discourse linkers. According to Nasu 2012, the TPS has a connotation similar to "speaking of the question, the answer is…" and occurs exclusively in replies to questions and takes place only when the speaker is qualified as a knowledge-holder (2012:220). Though the sentence-initial *ah* (啊) cannot be paraphrased in the same way and is not limited to replies to questions, it is clear that their difference lies in their connotations and the pertinent feature(s) behind them.

So, what licenses the sentence-initial *ah* (啊), and what is its contribution in a sentence?

We learned, in the beginning of this chapter, that this particle cannot occur in a plain sentence; it has to be additionally licensed by the interrogative force, specific conjunctions (covert or overt), or specific particles and adverbials. One possible way to abstract its nature is to find out what is common behind these licensers. Below is a list

of the licensers from (40) and a description of their occurrences in the previous examples:

(47)

Licenser	Description
Interrogative force	YES-NO QUESTIONS; *WH*-QUESTIONS
SFP *neh* (呢)	Insistence on forcing the given information on the addressee (Cheng 1997b) Making emphatic but warm and amicable assertions; may serve to remind (Chen 1989)
SFP *ôo* (喔)	Indication of warning (Cheng 1997b) Reminding, mitigating a command's forcefulness to warmth and concern; used to remind, propose, warn, provoke, or threaten (Chen 1989; Li 1950; Tin 1934) Advising or warning of the addressee about something detrimental which will occur to him if advice or warning is not heeded (Lien 1988)
SFP *lioò*	To remind or advise (Chen 1989)
SFP *lih* (哩)	Expressing an affirmative mood (MOE)
SFP *kóng* (講)	Insistence on forcing the given information on the addressee (Cheng 1997b) Emphasizing the truthfulness of the proposition (Chen 1989)
suah (煞)	"Unexpectedly"
ū (有)	Assertive (Cheng 1978, 1979)
mā (嘛)	"Also"
koh (閣)	"But also"; "moreover"
to (都)	"Additionally"
sī (是)	FOCUS MARKER
adversative conjunct	Expressing opposition or contrast
alternative conjunct	Presenting two alternatives
illative conjunct	Expressing an inference

*MOE: *Jiàoyùbù Táiwān Mǐnnányǔ Chángyòngcí Cídiǎn* (教育部台灣閩南語常用詞辭典)

Among the descriptions of the SFPs, we have keywords such as insistence, forcing, emphatic (emphasizing), warning, reminding, and affirmative; the intra-sentential adverbials, additionally, contribute meanings of novelty (*suah* (煞) "unexpectedly"), additivity (additive ones, including *mā* (嘛), *koh* (閣), and *to* (都)), and focus; the conjuncts that can follow the sentence-initial *ah* (啊) without extra licensing again convey contrastiveness, alternativity, and additivity as their main themes.

Generally, insistence, forcing, warning, and affirmative can be put under the term emphasizing, while additive elements express the predication holds for at least one alternative of the expression in focus (Krifka 1998). If there is anything common and extractable, focus seems to be the most probable outcome.

So far, we have not touched on the interrogative force. Interestingly, researchers have long been arguing that questions involve a focus semantic value, for they denote a set of alternatives (Hamblin 1973; Karttunen 1977; Rooth 1985, 1992). Syntactically, the focus intervention effect in questions is also observed and explained in the same manner (refer to Schaffar & Chen 2001; Kim 2002, 2005; Beck 2006; and Yang 2008).

Based on this line of reasoning, I suggest that the sentence-initial *ah* (啊) has to be licensed by some focus feature contained in the utterance that follows.

At this point, a natural question to ask is: what kind of focus is pertinent to our licensers?

The notion of focus can include several different subcategories, such as presentational focus, corrective focus, counter-presupposition focus, definitional focus, contingency focus, reactivating focus, and identificational focus, as compiled by Gussenhoven (2007). Conventionally, the focus phenomena are divided into two main groups, based on their discourse functions: the introduction of new information and the introduction of a contrast. Some linguists have argued for a distinction between these two types (É Kiss 1998; Zubizarreta 1998; Nespor & Guasti 2002; Donati & Nespor, 2003; Benincà & Poletto 2004), whereas others have claimed that the two types are not distinct (Frascarelli 2000; Brunetti 2004; Lonzi 2006; Stoyanova 2008). For those linguists who espouse a unified account for focus, the discourse functions of focus, which consist of either carrying new information or being contrastive, are determined by contextual factors (Rooth 1992; Brunetti 2004). Some linguists have even argued that newness of information and contrastiveness are not mutually exclusive phrase

properties; as demonstrated by these researchers, sometimes the two foci are compatible, and hybrid types can be observed (Bolinger 1961:87; Frascarelli 2000; Paoli 2009).

Abiding by the purpose of this chapter, I have no intention to argue in favor of either camp. Moreover, categorizing the elements in (47) one by one would lead us too far astray. Nonetheless, the hodgepodge picture shown in (47) seems to indicate that the types of focus are not crucial in licensing the element in question. So long as it provides a tinge of being emphatic or contrastive, the sentence-initial *ah* (啊) will be authorized. The only thing that is worth noting in regard to this is that pure new information is not enough to license the particle in question, as illustrated again in the following example:

(48) A: Gâu-tsá, tsiânn kú bô khuàinn. (TSM)
good.morning very long.time NEG see
爻早 誠 久 無 看見
"Good morning. It has been a long time since last time I saw you."

B-1: Gâu-tsá. * Ah guán kiánn tsa-hng khì tsò-ping
good.morning AH my son yesterday go do-soldier
爻早 啊 阮 囝 昨昏 去 做兵
--ah.
ASP
矣
(Intended) "Good morning. (Unlike what you may think or know,) my son went to perform military service yesterday."

B-2: Gâu-tsá. Ah guán kiánn tsa-hng khì tsò-ping
good.morning AH my son yesterday go do-soldier
爻早 啊 阮 囝 昨昏 去 做兵
--ah. --neh.
ASP PART
矣 呢
"Good morning. (Unlike what you may think or know,) my son went to perform military service yesterday."

B-3: Gâu-tsá. Ah lí kám tsai-iánn guán kiánn
good.morning AH you Q know my son

爻早		啊	你	敢	知影	阮	囝
tsa-hng	khì	tsò-ping	--ah?				
yesterday	go	do-soldier	ASP				
昨昏	去	做兵	矣				

"Good morning. Do you know that my son went to perform military service yesterday?"

In the reply in B-1, the information is new, whereas the sentence is infelicitous, contrary to B-2 and B-3. The contrast clearly comes from what the latter two have additionally, the sentence-final particle *neh* (呢) and the interrogative force, respectively.

Based on this observation, even though I would like to follow a more general and discourse-oriented version of focus notion in which it is either information representing new information or concerns a correction of existing information that focus meanings depend on, it is necessary to point out that new information is not sufficient to create focus. When we talk about focus here, we are not talking about conventional topic vs. focus/old information vs. new information/theme partition vs. rheme partition in a sentence (see von Prince 2012). We mean more than whether the information reflects a change in the world or a change in the hearer's knowledge about the world; we also mean whether new knowledge about the world is immediately or only potentially relevant to the hearer (Gussenhoven 2007).

Even so, simply saying that focus in questionis about being with or without contrastiveness does not suffice, either. Researchers have pointed out that contrastiveness must be relativized according to the discourse. Zimmermann (2007) suggests that contrastive focus analysis should take into account discourse-semantic notions such as hearer expectation or the discourse expectability of the focused content in a given discourse situation. According to Zimmermann, the less expected the focus content is judged to be for the hearer, relative to the Common Ground, the more likely a speaker is to mark the focus constituent by means of focalization. As for the explicit or implicit presence of contrasting alternatives in the (non-)linguistic context, Zimmermann suggests that this may be nothing but a side effect. Zimmermann's introduction of a measure of (assumed) unlikelihood adds a moment of subjectivity to the notion of contrastivity.

Drawing on the notion of the "activeness" of a referent (the element that corresponds to the specific linguistic expression under examination), which was introduced by Chafe (1987), Paoli (2009) argues that contrastivess has a pragmatic nature and is a scalar notion with degrees derived from the treatment of a piece of discourse in terms of cognitive processes dynamically unfolding through time.

According to Chafe, any information transmission event involves not only knowledge but also consciousness, and it is natural that at any moment only a small amount of that knowledge can be focused on or can become active. Regarding the levels of referent activeness, Chafe identifies "semi-active," "inactive," and "active."

By combining [+active] and [+contrastive], Paoli defines the explicitly contrastive focus, which is obtained by combining [-active] and [+contrastive]. According to Paoli, implicitly contrastive focus involves an element that is not in the active consciousness of the speaker but is part of the peripheral focus of participants' knowledge. For example, even though some knowledge has no linguistic mention in the current discourse, an utterance may still be in contrast to it; Paoli calls this contrast implicit, because the contrasted knowledge has not been explicitly mentioned in the conversation. This is exactly what we saw in (3), in which the sentence begins with *ah* (啊) and has no explicit connection with the preceding sentences. By comparing (3)with (30), we see that the sentence-initial *ah* (啊) does need a context; nevertheless, the referent can be [-active].

Due to the reasons previously mentioned, it is difficult to pin down the exact nature of the focus involved in licensing the element in question. In the following analysis, I will assume a general feature [focus], without looking into its composition, if there is any.

Remember that we have seen a likeness between the sentence-initial *ah* (啊) and Japanese NPS. Though the sentence-initial *ah* (啊) and Japanese NPS are similar in several aspects, there are two reasons that we cannot adopt Nasu's analysis for the former.

The first reason why we cannot adopt Nasu (2012)'s analysis concerns the position of *ah* (啊), which we pinpointed from (41) to (43) and summarized in (44).

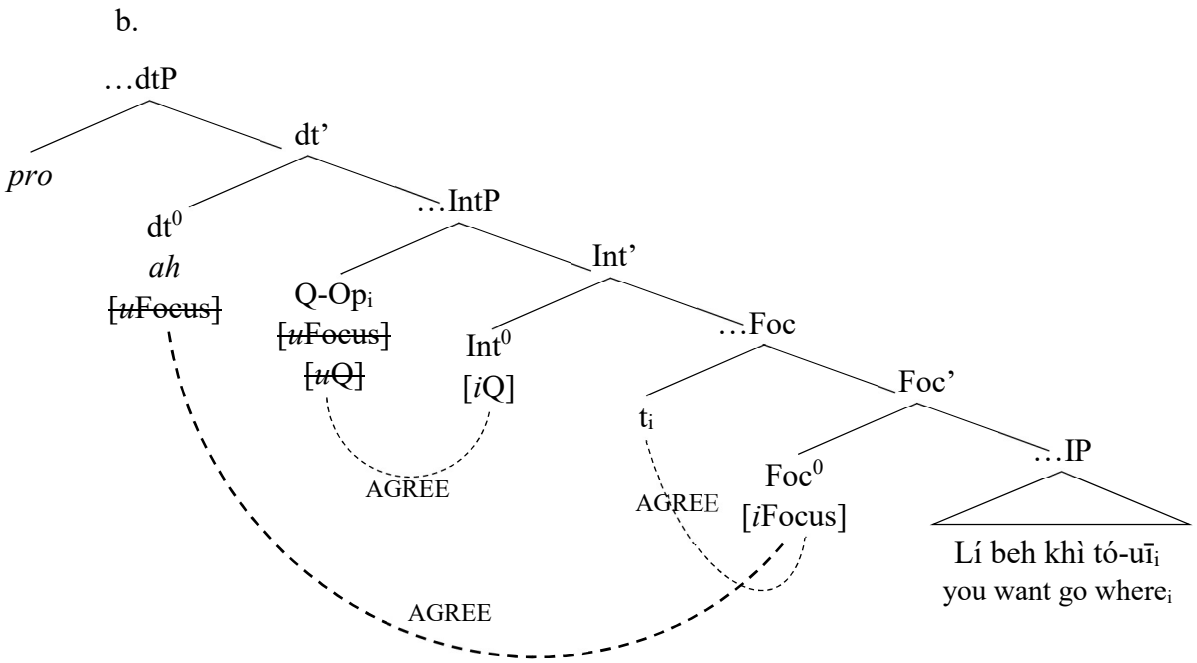
According to these examples, the sentence-initial *ah* (啊) is not in the SA shell but is lower than it, contrary to what Nasu suggests for *wa* in TPS, as shown in (45) and (46).

Secondly, in addition to its occurrence in a self-standing sentence, this *ah* (啊) is also used in the very beginning of a conjunct. Unless we want to analyze these two initial *ah*s (啊) separately, having *ah* (啊) in the SA shell would be inappropriate, for it is inconceivable that there is an independent SA shell projected in a conjunct that follows its antecedent.

Even so, I agree with Nasu's proposal that there is a covert topic (the *pro* in Nasu's analysis) present in the structure. With this covert topic, we have not only the flexibility of the topic constituency and the interpretation accounted for, but we also have the hallmark of discourse-oriented languages represented.

Aside from the likeness, a self-standing sentence involving a sentence-initial *ah* (啊) differs from Japanese TPS in that only some specific types of sentences are possible (refer to (47) and the ensuing discussion); this makes it more than a sentence with a null topic (Huang 1984). Here, I propose that it is *ah* (啊), the head of the dtP (Discourse Topic Phrase), that accommodates the covert topic at its specifier in a self-standing sentence and that carries an uninterpretable focus feature that has to be deleted via Agree, with the succeeding CP conveying an interpretable focus feature at its edge. This is illustrated by the following sentence:

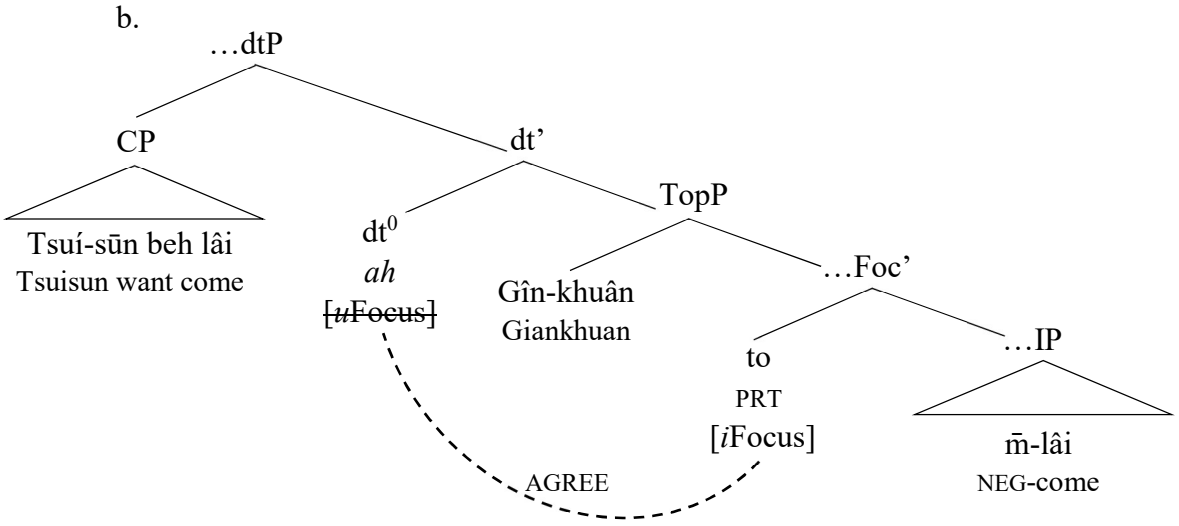
(49) a. Ah lí beh khì tó-uī? (TSM)
AH you want go where
啊 你 欲 去 佗位



Following Yang 2008, I assume that the Q-Op introduced by a *wh*-nominal is firstly merged to FocusP to check the focus feature and that it then moves up to IntP to check the Q-feature. Additionally, the dt^0, which is *ah* (啊), will agree with the Foc^0 to check its focus feature.

In contrast to a self-standing sentence where the covert topic represents the common knowledge shared by the participants in the discourse, the antecedent conjunct stands at the Spec.dtP in cases where *ah* (啊) precedes the second conjunct, as shown below:

(50) a. Tsuí-sūn beh lâi, ah Gîn-khuân to m̄-lâi. (TSM)
Tsuisun want come AH Ginkhuan PRT NEG-come
水順 欲 來 啊 銀環 都 毋來
"Tsuisun will come, whereas Ginkhuan is unwilling to come."



As seen in 0, *ah* (啊), the head of dtP, Agrees with the focus particle *to* (都) in the following CP to check its focus feature. That is to say, when *ah* (啊) intervenes between two conjuncts, its denotation and function do not differ from situations in which it occurs in a self-standing sentence. In both instances, *ah* (啊) works like a contrastive conjoining marker at the discourse level; it contrasts the succeeding utterance either with the preceding conjunct or the topic content from the common ground.

Based on the proposed syntax, let's proceed to the particle in question's semantics.

5.5 The semantics of sentence-initial *ah* (啊)

As we did in previous chapters, we will adopt Potts' (2005) parsetree interpretation for the semantics of sentence-initial *ah* (啊). Sitting between either the context and the utterance or the antecedent and the following conjunct, the sentence-initial *ah* (啊) is a conjunction—a two-place predicate—that takes the sentence that follows it as one of its arguments: it is a set of propositions or a singleton, depending on whether the sentence is interrogative. The other argument is a proposition that constitutes the context (or common ground) when *ah* (啊) occurs in a self-standing sentence; when *ah* intervenes between two conjuncts, the antecedent conjunct then serves as the other argument, which is also a proposition.

Now, let us temporally leave the cases in which a question follows the initial *ah* (啊) aside. Assume *p* is the proposition of the sentence that pursues *ah* (啊) and *q* is the

proposition of the context (common ground) or the preceding sentence. The denotation of *ah* (啊), based on our discussion so far, can be rendered as follows:

(51) Assume t: the utterance time (interval); w: possible world; CG: the common ground function; ⟦ah⟧ is defined only when ∃t' < t and

i) $CG(w)(t') \subseteq q_{<s,t>}$

ii) $CG(w)(t) \subseteq p_{<s,t>}$

iii) $CG(w)(t') \cap p_{<s,t>} \neq \emptyset \wedge CG(w)(t') \cap \neg p_{<s,t>} \neq \emptyset$

iv) $\exists q'_{<s,t>} [q'_{<s,t>} \cap q_{<s,t>} \neq \emptyset \wedge q'_{<s,t>} \cap p_{<s,t>} = \emptyset]$

If defined, then $⟦ah⟧ = \lambda p_{<s,t>}. \lambda q_{<s,t>}. p$

The denotation in (51) can be paraphrased as follows: Before the pursuing sentence is uttered, the common ground—which includes part of the information contained in the pursuing sentence (therefore, the pursuing sentence is not totally irrelevant to the common ground)—is presupposed. After the pursuing sentence is uttered, its content is completely incorporated into the common ground, and iv) ensures that the common ground is updated by the utterance of the pursuing sentence (*p* and *q* are not identical to each other).

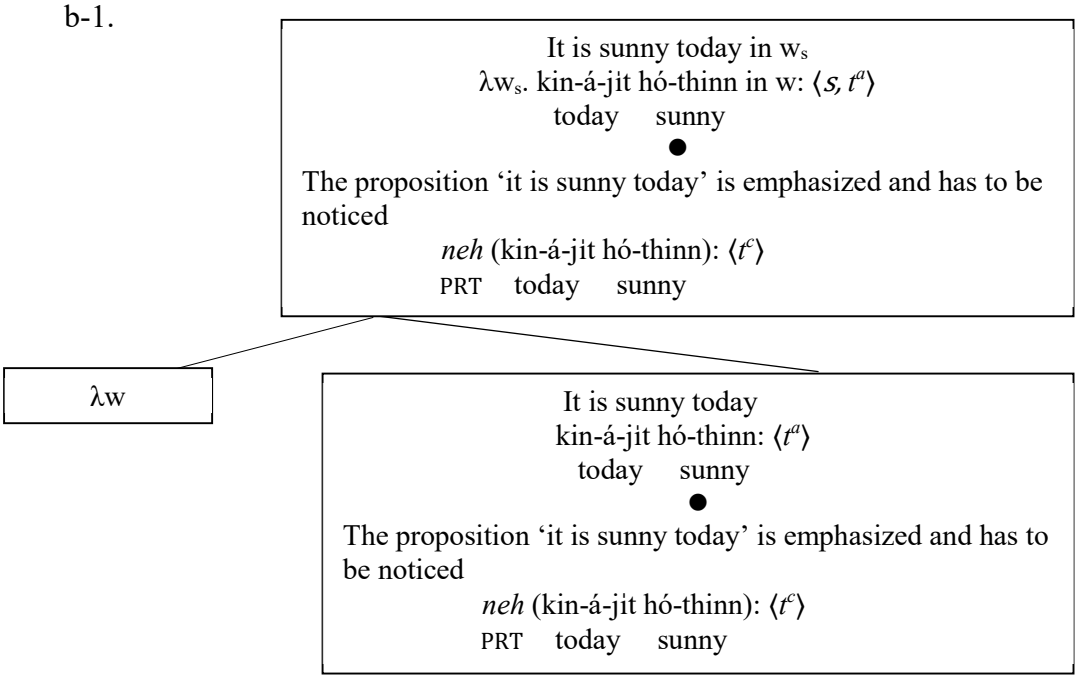
With (53), I demonstrate the computation in the following example with the sentence-initial *ah* (啊). In the following computation, I will assume the denotation of sentence-final particle *neh* (呢) to be adding an emphasizing and reminding comment on the proposition (ref. Cheng 1997b and Chen 1989):

(52) $⟦neh⟧ = \lambda p_{<s,t>}.$ p is emphasized and has to be noticed.

(53) a.	Tsa-hng	lo̍h-hōo,	ah	kin-á-ji̍t	hó-thinn	--neh.	(TSM)
	yesterday	rain	AH	today	sunny	PRT	
	昨昏	落雨	啊	今仔日	好天	呢	

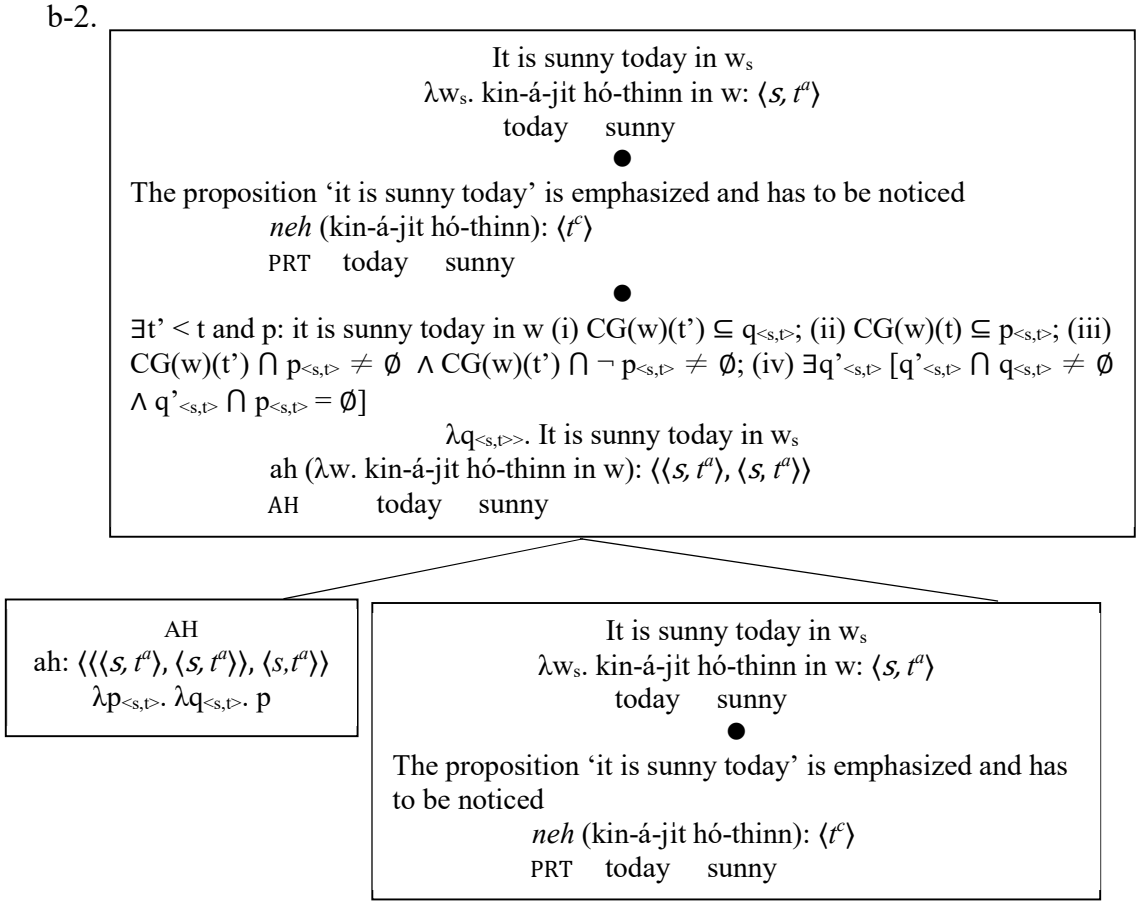
"It rained yesterday. (In contrast to the rainy day yesterday, allow me to remind you something that you may not notice) It is sunny today."

b-1.



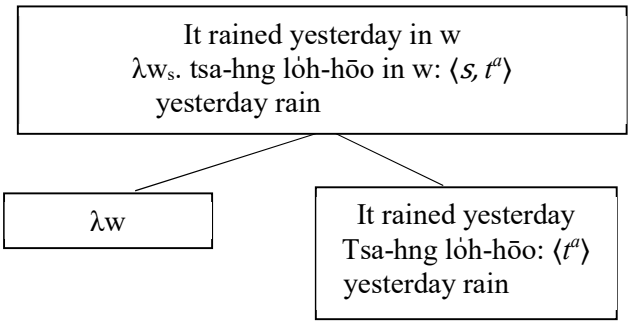
In a bottom-up fashion, the particle *neh* (呢) first applies to the content of the second sentence and gives rise to a not-at-issue comment that the content is emphasized and has to be noticed, which is of type $\langle t^c \rangle$. On the other hand, by predicate abstraction, we then insert a world variable into the sentence and derive a proposition.

b-2.



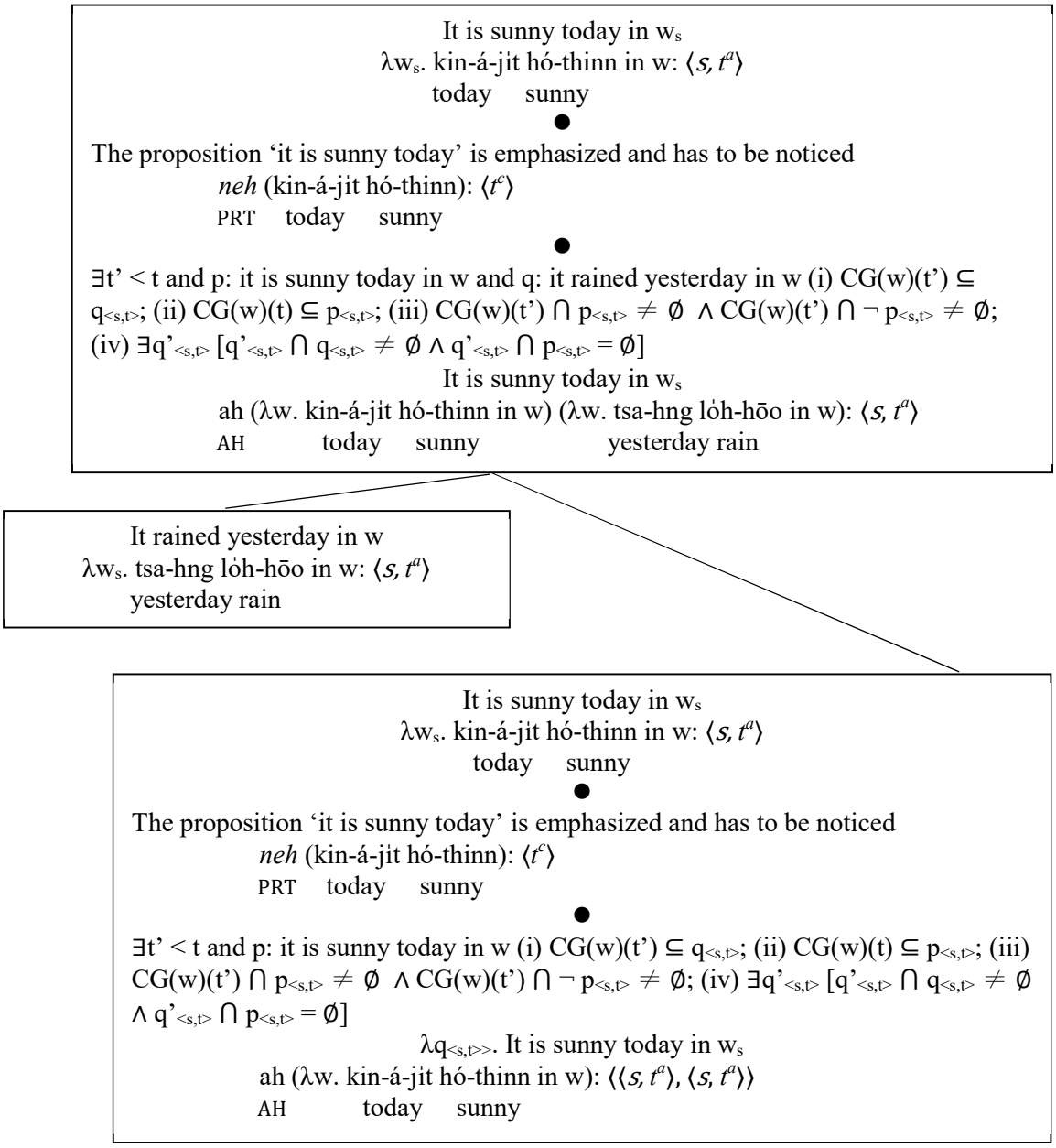
In (53)b-2, the result of the previous step is combined with the sentence-initial *ah* (啊), which takes the proposition as its first argument and produces additional content, including the defining conditions of the sentence-initial *ah* (啊), as shown at the bottom of the top box.

b-3.



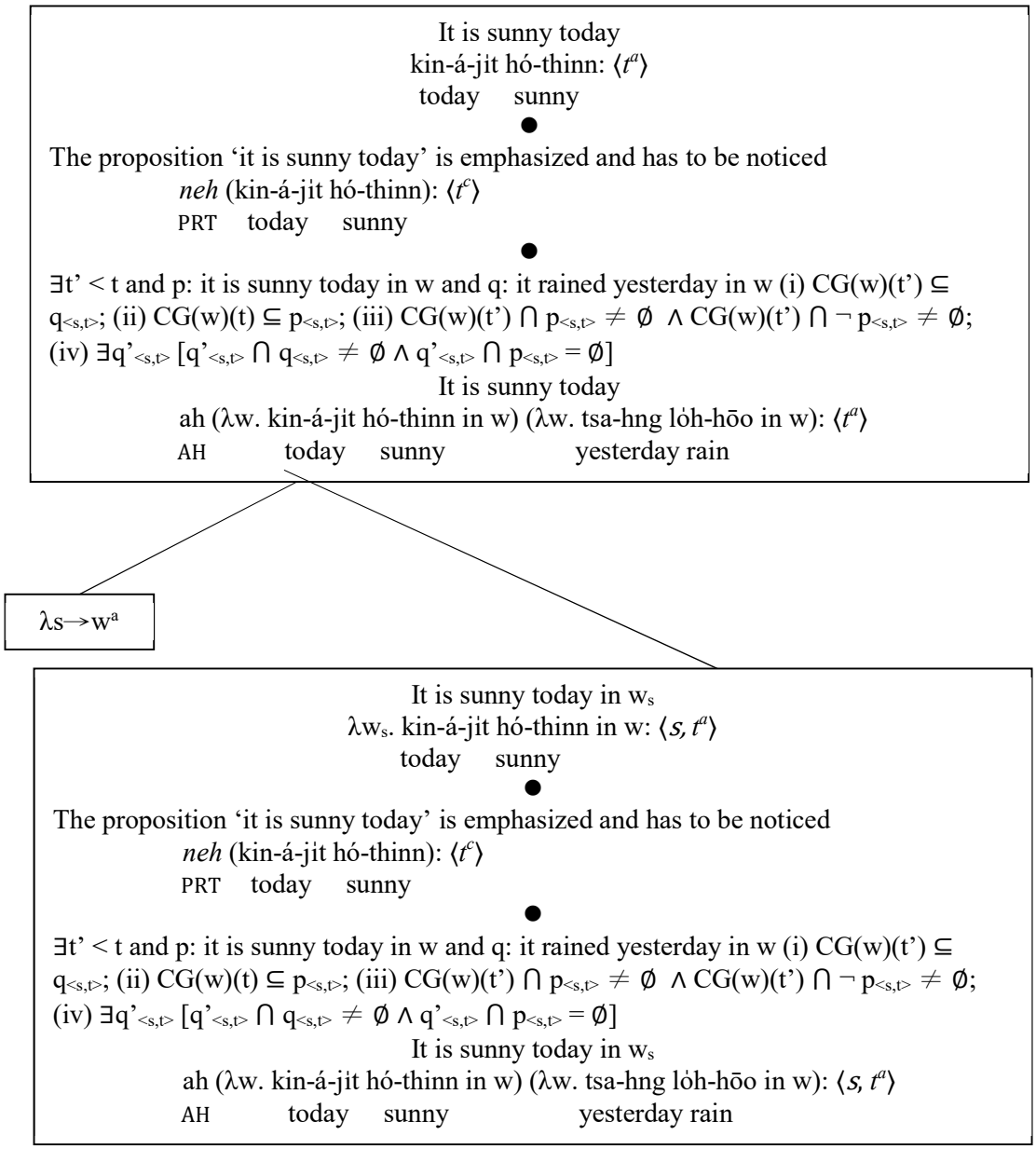
Before we proceed from (53)b-2, let us prepare the second argument for *ah* (啊). By predicate abstraction, we convert the first sentence in (53)a into a proposition. Now, it is ready to be combined with the result of (53)b-2.

b-4.



By combining the results of (53)b-2 and (53)b-3, we obtain what is shown above. The result of this step only differs from what we got in 0b-2, in that the sentence-initial *ah* (啊) is now saturated except for the possible world argument, as shown in the bottom of the top box in (53)b-4. Now, all we have to do is fill in the world variables left here and there.

b-5.



By replacing all of the world variables with the world of evaluation, we then derive the meaning of this sentence, which can be paraphrased as follows: before the utterance time, with the common ground included in the proposition "it rained yesterday," the proposition "it is sunny today" is intersected with the common ground (instead of being totally irrelevant); after the utterance time, the proposition "it is sunny today" includes the common ground.

Now, let come back to the cases in which a question follows initial *ah* (啊). Traditionally, questions are considered sets of propositions (Hamblin 1973; Karttunen 1977, among many others). To accomplish the composition, we have to either revise

(51) to accommodate an argument as a set of propositions or perform type-shifting in the computation process. I will not go into this issue further.

5.6 Summary

In this chapter, we have explored the usage, distribution, and licensing environments of sentence-initial *ah* (啊) from a comparative perspective.

Syntactically, sentence-initial *ah* (啊) has to be licensed by a contrastive feature. Standing high in the left periphery, it is only below the SA shell. This additional jigsaw piece has further improved our chart in the very left periphery.

(54) [$_{SaP}$ [$_{Sa'}$ ***leh^{1}*** (咧) [$_{SaP}$ [$_{Sa'}$ ***leh^{2}*** (咧) [$_{dtP}$ [$_{dt'}$ ***ah*** (啊) …[$_{FocP}$ [$_{Foc'}$ ***sī^{CVF}*** (是)

[$_{Speech\text{-}actP}$ …[$_{FocP}$ [$_{Foc'}$ ***sī^{dictum}***(是) [$_{PartP}$ [$_{Part'}$ ***leh^{3}*** (咧) [$_{EvalP}$ [$_{Eval'}$ [$_{EpistP}$ [$_{Epist'}$ …

Semantically, sentence-initial *ah* (啊) presupposes an update of the common ground and updates the common ground with the content of the following sentence; moreover, it also presupposes that the content of the following sentence is already intersected with the common ground before the utterance time. By doing so, its denotation requires relevance between the preceding sentence (or the context) and the following sentence and also produces a sense of contrastiveness.

CHAPTER 6 A NEGATOR ABNEGATING NEGATION

Cross-linguistically, researchers have found that negative words may be used without negating power. Examples include the "fake negation-cleft" in Brazilian Portuguese and the phenomenon of expletive negation illustrated in the following:

(1) (E) **não** é que o João vendeu o carro para a Maria!
(And) **not** is that the John sold the car to the Mary
"John sold the car to Mary (and the speaker disapproves of it)."
(Brazilian Portuguese; Bastos-Gee 2011:95(21))

(2) Je crains qu'il **ne** vienne. (French; Yoon 2011:13 (28))
I fear that-he **not** come.SUBJ
"I fear that he will come."

In both of examples above, the negatives do not negate the proposition where they occur. Nonetheless, this does not mean that they are semantically vacuous. In (1), the negative conveys the speaker's disapproving attitude; in (2), it expresses a not-at-issue evaluative sense, which Yoon (2011) suggests naming evaluative negation, in contrast to the generally accepted term of expletive negation.

For speakers of Sinitic languages, negatives that abnegate negating power is also not something new. By way of example:

(3) Chā yìdiǎn **méi** sǐ diào. (TM)
fall.short.of a.little **NEG** die ASP
差 一點 沒 死 掉 "
"He was almost killed."

(4) **Bô** tsiȧh-pn̄g tsìn-tsîng, tō thau tsiȧh tiám-sim. (TSM)
NEG eat-rice the.time.before then secretly eat dessert
無 食飯 進前 就 偷 食 點心
"Before having a meal, he stealthily ate dessert."
,

(5) Qín wáng dàilǐng zhòng jiàng, suíjí bānshī, fàng
Qin king lead many general immediately withdraw.troop release
秦 王 帶領 眾 將 隨即 班師 放
pào sān sheng, qǐ bīng jiù xíng, yī lù shàng
cannon three sound rise soldier then go one road up
炮 三 聲， 起 兵 就 行 一 路 上
hǎo**bù** déyì.
good.**NEG** complacent (MC; *Shuōtáng* 64)
好不 得意

"The king of Qin with his generals withdrew the troops in triumph immediately. After firing cannons for three shots, the troops set out. They were very complacent all the way."

The first two examples above are supposed to be instances of negation expletive/evaluative negation in TM and TSM. In (5), we have the peculiar usage of *bù* (不) in MC. The negative word *bù* (不) in the sequence *hǎobù* (好不), which precedes an adjective, not only fails to negate the predicate but even strengthens the degree adverb (see Yuan 1984, 1987 among others).

In this chapter, we will target one usage of the TSM negative *bô* (無). Under this usage, just as seen in the previous examples, it does not negate the proposition; instead, the negative sense is shifted to the not-at-issue level. Here is an instance:

(6) Lí ê bō-á tī hia **bô**! (TSM)
you POSS hat in there ***BO***
你 的 帽仔 佇 遐 無

"I know, and I suppose you also know, that you hat is there! (Don't tell me you don't know it.)"

In addition to the sentence-final position, this negative can also occur initially or intra-sententially. Instead of being a negator, the usage of *bô* (無) conveys a meaning of "obviously/undoubtedly" with additional illocutionary force. It is therefore alluring to suggest that the negative word has gone through a further grammaticalization process

such that it can occur either as a performative element or as an adverbial that is relevant to some kind of speaker attitude.

In the following, I will argue to identify this usage of *bô* (無) as an evidential marker with illocutionary force in TSM. In addition to exposition of this element, theoretically, the multiple positions where this *bô* (無) can occur in a sentence evidence the anti-symmetrical structure of TSM and support remnant movement analysis for sentence-final particles.

The discussion will proceed as follows. The first section is devoted to a brief introduction and review of previous studies on the negative word in question. In 6.2, we will go through the data and generalize from our observations. Thoughts on the etymology and some cross-linguistic comparisons will be presented in 6.3, followed by syntactic and semantic analyses in 6.4 and 6.5, respectively. This chapter will be concluded in 6.6 with a brief discussion on a theoretical consequence.

6.1 Previous studies on the negative *bô* (無) in TSM

Literature about the negative *bô* (無) is numerous. As early as the late 19th century, *bô* (無) had been noted as the negated form of *ū* (有) "have" (Douglas 1873:22). Both *bô* (無) and its positive counterpart *ū* (有) are versatile. Previous studies list different usages of these two items, and a comprehensive review can be found in Lien 2015b (refer to Chin 1934; H. Li 1950; Huang 1958; Wu 1958; P. Li 1971; Nakajima 1971; Cheng 1985, 1997b; R. Li 1986; Y. Li 1986; Chen 1987; Yang 1991; Zhou 1991; Saillard 1992; Tang 1994; Lu 1999, 2003, among many others).

Based on the core meanings of *ū* (有), which are existing and possessing, *bô* (無) basically denotes nonexistence or not having, and it can precede and modify either a NP or VP to negate the existence of an object or an event, experience, or habit (Pusando Shujin 1899; Ogawa 1931-2; Chin 1934; H. Li 1950; Wang 1967; P. Li 1971; Tsao & Cheng 1995). Though no consensus exists among researchers about what is exactly negated by the negative (cf. Huang 1958; P. Li 1971; Cheng 1985; Teng 1991), Tang 1994 provides a systematic review and points out that the distribution of *bô* (無) is parallel to that of *ū* (有), which can be employed in different positions with different functions.

As pointed out by Lien (2015b), the usages of *bô* (無) include as a content word, a non-existential verb, and a function word. There are two possible interpretations when it is used as a negative: the one with *ū* (有) in its reading and the one without it (Lien 2010). Per its distribution, Lien suggests the following eight constructions of it:

(7) a. VERB + *bô* (無) + COMPLEMENT + (NOUN) (Lien 2015b:171)

b. VERB + *bô* (無) + (NOUN)

c. *bô* (無) + predicative.phrase

d. *bô* (無) + MODAL + VP

e. DEGREE.ADVERB + [*bô* (無)^{adj} + TRANSITIVE.VERB]

f. DEGREE.ADVERB + [*bô* (無)^{adj} + NOUN]

g. MAIN.CLAUSE + *bô* (無) (forming an alternative question)

h. *bô* (無) + MAIN.CLAUSE (*bô* (無) as a discourse adverb; also refer to Yang 2012:281-2)

Due to its characteristics, Yang (2012) calls *bô* (無) a negative possessive/existential/affirmative aspect. Yang suggests that the categorical status of *bô* (無) should include verb, tense-modal-aspect, negative, question marker, and discourse marker (2012:285 Table 7.2). Regarding its semantic layering, she further advocates the following: negated verb, aspectual negative, aspectual interrogative, pure negator, and non-aspectual interrogative (2012:365 Table 8.7). Following up on her observation in Yang 2012, she looks into the V *bô* DP construction in Yang 2014, in which the diachronic development of Mandarin *méi* (沒) and TSM *bô* (無) are compared and the synchronic differences between these two are accounted for by the pace of syntactic change.

To my knowledge, none of these previous studies have touched upon the usage exemplified in (6). In the next section, we will focus on this usage of *bô* (無) and look into its syntax and semantics.

6.2 Data and observations

As mentioned in the beginning, the usage of *bô* (無) in a question conveys a meaning of "obviously/undoubtedly" with additional illocutionary force, similar to the

English colloquial sentence initiator "mind you," which expresses a meaning such as "just so you know" or "and to let you know."

In addition to its sentence-final occurrence as shown in (6), this usage of *bô* (無) also appears sentence-initially or intra-sententially. A different position brings a distinct tint of theme-rheme demarcation.[86]

(8) a. Guá ê pit tú-tsiah hē tī toh-tíng **bô^{24}**. (TSM)
I POSS pen not.long.ago put PREP desk-top **BO**
我 的 筆 拄才 下 佇 桌頂 無
"I know, and I suppose you also know, that my pen was on the desk just a moment ago. (Don't tell me you don't know it.)"

b. Guá ê pit tú-tsiah **bô^{33}** hē tī toh-tíng.
I POSS pen not.long.ago **BO** put PREP desk-top
我 的 筆 拄才 無 下 佇 桌頂
"Regarding my pen, just a moment ago, I know, and I suppose you also know, that it was on the desk. (Don't tell me you don't know it.)"

c. Guá ê pit **bô^{33}** tú-tsiah hē tī toh-tíng.
I POSS pen **BO** not.long.ago put PREP desk-top
我 的 筆 無 拄才 下 佇 桌頂
"Regarding my pen, I know, and I suppose you also know, that it was on the desk a moment ago. (Don't tell me you don't know it.)"

d. **Bô^{33}** guá ê pit tú-tsiah hē tī toh-tíng.
BO I POSS pen not.long.ago put PREP desk-top
無 我 的 筆 拄才 下 佇 桌頂
"I know, and I suppose you also know, that my pen was on the desk just a moment ago. (Don't tell me you don't know it.)"

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[86] Unlike *leh* (咧) discussed in chapter 3, which can have multiple occurrences in a sentence, the evidential *bô* (無) is always solitary. Reduplicating it in another potential position fouls the sentence.

i) * Guá ê pit bô tú-tsiah bô hē tī toh-tíng bô. (TSM)
I POSS pen BO not.long.ago BO put PREP desk-top BO
我 的 筆 無 拄才 無 下 佇 桌頂 無
(Intended) "Regarding my pen, I know, and I suppose you also know, that it was on the desk a moment ago. (Don't tell me you don't know it.)"

Therefore, we should not presume there are different instances of evidential *bô* (無) as we do for *leh* (咧).

Though it is subtle, the chunk preceding *bô* (無) seems to be something set by the speaker as a topic subject for further commenting or shared knowledge between her and the addressee; it is further information partitioning in addition to the obvious/undoubted sense.

Apart from other positions accessible by *bô* (無), a first glance of the sentence-final occurrence of *bô* (無) in (6) can lead one to take it as a negative question particle (NQP). Nonetheless, it is not, for at least five reasons.

Firstly, in the targeted usage, we observe no tone neutralization on *bô* (無), in contrast to using *bô* as a neutral question particle. Compare (9) with (10) (Double hyphens (--) indicate the following word is tone-neutralized. The examples are pitch marked with superscripted numbers) (Refer to Cheng, Huang, and Tang 1996).

(9) Tsuí-sūn beh lâi --bô^{0}? (TSM)
Tsuisun will come Q
水順 欲 來 無
"Will Tsuisun come?"

(10) Tsuí-sūn beh lâi bô^{24}. (TSM)
Tsuisun will come BO
水順 欲 來 無
"I know, and I suppose you also know, that Tsuisun will come. (Don't tell me you don't know it.)"

Unlike the tone-neutralized one in (9), *bô* (無) in (10) is pronounced with a rising tone, which is its citation tone.

Secondly, (9) and (10) are quite distinct from each other in their interpretation. Contrary to (9), it is impossible for one to employ (10) to issue a question.

Thirdly, unlike NQP *bô* (無), which cannot be used without *ū* (有) preceding a locative predicate, the usage in question does not abide by this requirement. Compare the two examples below:

(11) a. Tsuí-sūn ū tī hia --bô^{0}? (TSM)
Tsuisun have PREP there Q

水順　　有佇　遐　　無

“Is Tsuisun there?”

b.*Tsuí-sūn　tī　hia　--bô^{0}?　(TSM)

Tsuisun　PREP　there　Q

水順　佇　遐　無

(Intended) “Is Tsuisun there?”

(12) Tsuí-sūn　tī　hia　bô^{24}.　(TSM)

Tsuisun　PREP　there　BO

水順　佇　遐　無

“I know, and I suppose you also know, that Tsuisun is there. (Don’t tell me you don’t know it.)”

The contrast above may be relevant to some kind of agreement between the NQP *bô* (無) and the predicate or as the residue of its historical origin in disjunctive questions.

Parallel to the contrast above, Lien (2015b:177) points out the agreement requirement in a question formed by NQP *bô* (無). According to Lien, NQP *bô* (無) can only be attached to a positive sentence. This constitutes the fourth difference between the two, demonstrated as follows:

(13) * Tsuí-sūn　tsa-hng　bô　lâi　siōng-pan　--bô^{0}?　(TSM)

Tsuisun　yesterday　NEG　come　work　Q

水順　昨昏　無　來　上班　無

(Intended) “Didn't Tsuisun come to work yesterday?”

(14) Tsuí-sūn　tsa-hng　bô　lâi　siōng-pan　bô^{24}.　(TSM)

Tsuisun　yesterday　NEG　come　work　BO

水順　昨昏　無　來　上班　無

“I know, and I suppose you also know, that Tsuisun didn't come to work yesterday. (Don’t tell me you don’t know it.)”

Contrary to NQP *bô* (無), the usage in (14) is not problematic when occurring in a negated sentence; that is to say, the usage in question does not obey the agreement observed on NQP *bô* (無), and therefore it cannot be the NQP.

Lastly, NQPs are only used sentence-finally, whereas the usage in question can be used with a phrase. Their phrase-attaching capacities compared in the replying part of the dialogue below.

(15) A: Tsa-hng lóng bô lâng lâi. (TSM)
yesterday all NEG person come
昨昏 攏 無 人 來
"No one came yesterday."

B: Ū --ah. Tsuí-sūn bô^{24}.
have PRT Tsuisun BO
有 啊 水順 無
"Someone did. I know, and I suppose you also know, that Tsuisun came. (Don't tell me you don't know it.)"

B': Kám ū-iánn? Tsuí-sūn *(ū lâi) --bô^{0}?
Q really Tsuisun have come Q
敢 有影 水順 有 來 無
"Really? Did Tsuisun come?"

As shown above, the usage in question can surface in places other than the sentence-final position, which evidences that it is neither a negative question particle nor a tag question.

In addition to these differences between this usage and NQP *bô* (無), the most perspicuous hallmark of this usage is its occurrence in several different positions in a sentence. The flexibility with respect to loci has been shown in (8), reproduced as follows:

(16) a. Guá ê pit tú-tsiah hē tī toh-tíng **bô^{24}**. (TSM)
I POSS pen not.long.ago put PREP desk-top **BO**
我 的 筆 拄才 下 佇 桌頂 無
"I know, and I suppose you also know, that my pen was on the desk just a moment ago. (Don't tell me you don't know it.)"

b. Guá ê pit tú-tsiah **bô^{33}** hē tī toh-tíng.
I POSS pen not.long.ago **BO** put PREP desk-top
我 的 筆 拄才 無 下 佇 桌頂

"Regarding my pen, just a moment ago, I know, and I suppose you also know, that it was on the desk. (Don't tell me you don't know it.)"

c. Guá ê pit **bô[33]** tú-tsiah hē tī toh-tíng.
I POSS pen **BO** not.long.ago put PREP desk-top
我 的 筆 無 拄才 下 佇 桌頂
"Regarding my pen, I know, and I suppose you also know, that it was on the desk a moment ago. (Don't tell me you don't know it.)"

d. **Bô[33]** guá ê pit tú-tsiah hē tī toh-tíng.
BO I POSS pen not.long.ago put PREP desk-top
無 我 的 筆 拄才 下 佇 桌頂
"I know, and I suppose you also know, that my pen was on the desk just a moment ago. (Don't tell me you don't know it.)"

If we demarcate the sentence into several chunks that can be topicalized, we will see that this *bô* (無) can intervene between any two of them, in addition to occurring in the sentence-initial and sentence-final positions.

So far, we have seen evidence that this usage cannot be the NQP. However, some people may insist that this is nothing but a form of *bô* (無) being used as a tag question. In the following, I will argue against this possibility.

First, in contrast to tag questions—with which pauses or prosodic/intonation breaks are required—note that there is no prosodic/intonation break found between this *bô* and elements adjacent to it. In Li 2007, the tag form *ū --bô* (有無) is identified as a discourse use of *bô* (無), which is employed to catch the hearer's attention and caries no lexical meaning but only a pragmatic clue, similar to "got it?" or "you know?" (also refer to Yang 2012:281).

(17) Juȧh-thinn sî, ū --bô, pēnn-lâng tiānn-tio̍h ē khah tsē.
hot.day time U BO patient definitely will more many
熱天 時 有無 病人 定著 會 較 濟
(Southern Min; Li 2007:203)
"When it is hot, you know, the number of patients usually increases."

Apart from their different denotations, this tag usage is composed with an additional word *ū* (有) "have," and pauses are required before and after it.

On the contrary, no pause or break accompanies the item with which we are concerned. In fact, the absence of a pause and break is further evidenced by the tone and intonation pattern of the sentence where this *bô* (無) occurs. Intriguingly, when it immediately precedes the predicate, as when *bô* (無) is used as a negator (see (7)c), no difference of tone or intonation is discernible between the sentence with this usage and a negated sentence. In other words, (16)b in fact has two available interpretations, as repeated to show below:

(18)	Guá	ê	pit	tú-tsiah	**bô^{33}**	hē	tī	toh-tíng.	(TSM)
	I	POSS	pen	not.long.ago	**BO**	put	PREP	desk-top	
	我	的	筆	拄才	無	下	佇	桌頂	

(Reading 1) "Regarding my pen, just a moment ago, I know, and I suppose that you also know, that it was on the desk. (Don't tell me you don't know it.)"

(Reading 2) "My pen was not on the desk a moment ago."

Not only the prosody and intonation of this sentence but also the mid-level tone (the sandhi tone of *bô* (無)) in these two readings are exactly the same, and the reading can only be decided by the context. The phonological inseparability clearly indicates that this usage is not inserted like a filler or a tag.

Moreover, this usage of *bô* (無) does not syntactically behave like a tag question either. Tag questions, which are syntactically independent clauses, are compatible with polarity questions composed of *kám* (敢) and NQP *bô* (無) in TSM (refer to Lau 2010), whereas this *bô* (無) is not. Compare the two sets of examples below.

(19)	a. Tsuí-sūn	tsa-hng	kám	ū	lâi,	ū	--bô^{0}?	(TSM)
	Tsuisun	yesterday	Q	have	come	have	Q	
	水順	昨昏	敢	有	來	有	無	

"Did Tsuisun come yesterday, did he?"

b. Tsuí-sūn	tsa-hng	ū	lâi	--bô^{0},	ū	--bô^{0}?	
Tsuisun	yesterday	have	come	Q	have	Q	

水順　昨昏　有　來　無　有　無

"Did Tsuisun come yesterday, did he?"

(20) a.* Tsuí-sūn tsa-hng kám ū lâi **bô^{24}**? (TSM)
Tsuisun yesterday Q have come **BO**
水順　昨昏　敢　有　來　無
(Intended) "I know, and I suppose you also know, whether Tsuisun came yesterday?"

b.* Tsuí-sūn tsa-hng kám **bô^{33}** ū lâi?
Tsuisun yesterday Q **BO** have come
水順　昨昏　敢　無　有　來

c.* Tsuí-sūn tsh-ang **bô^{33}** ū lâi --bô^{0}?
Tsuisun yesterday **BO** have come Q
水順　昨昏　無　有　來　無

In (20), the usage we are concerned with has been applied to three different positions. None of them is grammatical, unlike the sentences with a tag question in (19). If we consider this carefully, we will see that this contrast is not only due to the usage under investigation not being a tag question; in fact, the reason is as simple as the usage not being interrogative at all. Naturally, the sentences in (20) cannot be grammatical because each of them is inflicted by conflicting sentence forces.

In fact, *bô* (無) itself is never a licit form of tag question in TSM (see (21)). The only way in which it can be used interrogatively is as an echo question toward a sentence negated by *bô* (無). Compare the examples in the three sets below.

(21) a. Tsuí-sūn bîn-á-tsài khíng lâi, sī--m̄? / (kám) m̄-sī?
Tsuisun tomorrow willing come be NEG Q NEG-be
水順　明仔載　肯　來　是毋　/　敢　毋是
/ tio̍h--bô^{0}? / *bô^{24}? (TSM)
right NEG BO
著　無　無

"Tsuisun is willing to come tomorrow, isn't he?/right?"

b. Tsuí-sūn ū lâi, ū--bô? / sī--m̄? / (kám) m̄-sī?

Tsuisun have come have-NEG be-NEG (Q) NEG-be

水順 有 來 有無 是毋 敢 毋是

/ tio̍h--bô^{0}? / *bô^{24}?

right-NEG BO

著無 無

"Tsuisun came, didn't he?/right?"

(22) A: Tsuí-sūn bô lâi. (TSM)

Tsuisun NEG come

水順 無 來

"Tsuisun didn't come."

B: Bô^{24}?

NEG

無

"Really? (I think he did.)"

Just like the contrast between (19) and (20), in (21), the presence of *bô* (無) is infelicitous, contrary to the tag questions. The environments in which it can occur as a question are very limited, as illustrated in (22). All in all, unless *bô* (無) is used as an echo question in reply to a sentence containing a negator *bô* (無), it cannot be used as a question unconditionally—needless to say, as a tag question.

Thus far, we have seen that this usage of *bô* (無) is neither a NQP nor a tag question. If so, is there anything similar to it? Among its candidate analogues, the negated copula is the closest one. This is true in both MC and TSM. With the negative form of copula, one can reconfirm something or issue a tag question, as illustrated in the following.

(23) Wǒ de bǐ gāngcái búshì fàng zài zhuō-shàng? (MC)

I POSS pen a.moment.ago NEG.be put PREP desk-top

我 的 筆 剛才 不是 放 在 桌上

"Isn't it true that my pen was on the desk a moment ago?"

(24) Guá ê pit tú-tsiah m̄-sī hē tī toh-tíng? (TSM)
I POSS pen a.moment.ago NEG.be put PREP desk-top
我 的 筆 拄才 毋是 下 佇 桌頂
"Isn't it true that my pen was on the desk a moment ago?"

With the sentences in (23) and (24), functionally, one can more or less achieve the same communication goal as with (16) in most cases. However, they should not be considered identical regarding the usage of *bô* (無) in question. This is not only because they have different sentence force or do not have the specific illocutionary speech-act that the usage of *bô* (無) in question has but also because, syntactically, they are not the same.

The fact that they involve different syntactic operations can be demonstrated in the following way, in which only the usage of *bô* (無) in question can be sentence-initial:

(25) * Búshì Zhāngsān zuótiān lái zǎo nǐ, xiàwǔ sì
NEG.be Zhangsan yesterday come seek you how.come four
不是 張三 昨天 來 找 你 下午 四
diǎn nà shíhòu? (MC)
o'clock that moment
點那 時候
(Intended) "Didn't Zhangsan come to visit you yesterday, around 4 o'clock?"

(26) Bô[33] Tsuí-sūn tsa-hng lâi tshuē --lí, uá sì tiám
BO Tsuisun yesterday come seek you near four o'clock
無 水順 昨昏 來 揣 你 倚 四 點
hit-tang-tsūn. (TSM)
that-moment
彼當陣 "
"I know, and I suppose you also know, that Tsuisun came to visit you yesterday, around 4 o'clock. (Don't tell me you don't know it.)"

Contrary to (26), the sentence that begins with *búshì* (不是) in (25) is unacceptable.[87] This tells us that how we employ *búshì* (不是) and its TSM counterpart in (23) and (24) should not be taken as being equivalent to the usage of *bô* (無) in question. Needless to say, they also differ in other aspects, as aforementioned.

We have hitherto demonstrated that this usage of *bô* (無) is neither an interrogative nor an equivalent of the negative word in a rhetorical question. Intriguingly, as I will show below, this *bô* (無) is not even negative due to its lack of NPI (negative polarity item) licensing power. By way of example:

(27)	Tsuí-sūn	tsa-hng	bô^{33}	tsia̍h	jīm-hô	ê	mi̍h-kiānn.	(TSM)
	Tsuisun	yesterday	BO	eat	any	LK	thing	
	水順	昨昏	無	食	任何	的	物件	

(Available reading) "Tsuisun did not eat anything yesterday."
(Unavailable) "I know, and I suppose you also know, that Tsuisun ate anything he could obtain yesterday. (Don't tell me you don't know it.)"

Remember how we saw in (18) that the intonation, tone, and prosody do not help us to distinguish the negating reading from the usage of *bô* (無) targeted in this chapter. This phenomenon therefore provides us with an environment in which to test the NPI licensing. Interestingly, as shown above, the reading supposedly contributed from the usage of *bô* (無) with which we are concerned disappears. This contrast evidences that this *bô* (無) is not even a negative because it cannot license an NPI.

Aside from its non-interrogative and non-negative nature, the sentences containing this element also belong to main clause phenomena (MCP). See the example below.

(28)	*	Tsuí-sūn	kah-ì	[$_{NP}$[$_{CP}$	tsa-hng	bô^{33}	bé	siōng	tsē
		Tsuisun	like		yesterday	BO	buy	most	many
		水順	佮意		昨昏	無	買	上	濟
		tsheh	ê]	lâng].					(TSM)
		book	LK	person					

[87] This sentence is felicitous for some Taiwanese Mandarin speakers, probably due to the influence from TSM.

冊　　的　　人

(Intended) “Tsuisun likes the person who bought the most books, and his/her buying of books is known by me and supposedly also by you, and I don’t expect you to deny this.”

From (28), it is clear that this element can only be used in a matrix clause. The most intuitive way to account for this is that it occupies a high position in CP, which is not available (truncated) in a subordinate.

As noted by Yang (2012), using the element *bô* (無) as a discourse marker is nothing new in TSM. Besides the tag *ū --bô* (有無), Yang (2012) also observes two other usages of *bô* (無) as a discourse adverb, as exemplified below.

(29) **Bô^{24}** lí tsiàh khuànn-māi --leh mah.
BO you eat look-try PRT PRT
無 你 食 看覓 咧 嘛
“Why don’t you try (it) then?” (TSM; revised from Yang 2012:281 (20))

(30) It-tīng ài kā tshuā --khí-lâi, **bô^{24}** --tsià, sī tsin kan-khóo.
definitely need DISP marry ASP **BO** NMLZ COP very difficult
一定 愛 共 娶 起來 無 者 是 真 艱苦
“(You) definitely need to marry her. If not, it’d be difficult.”
(TSM; Yang 2012:292 (24))

According to Yang, *bô* (無) in (29) is used to provide suggestions, and the element in (30), used in conditionals, expresses negation under circumstances in which certain conditions do not meet.[88] The same usage, as suggested by Chang (1997), is classified as conditional and a response. I would like to point out that none of these two should be confused with the usage that we are concerned with. Firstly, the usages in these two instances are bound to be sentence-initial, in contrast to the distribution of the usage in question. Secondly, unlike the mid-level tone (the sandhi tone) employed by the usage

[88] Yang speculates that the form *bô --tsià* (無者) was reduced from *nā bô --tsià* (若無者) “if not NMLZ,” in which *tsià* (者) is a C. I agree with her on this.

targeted in this chapter, these two usages are pronounced with the rising tone: the citation tone of *bô* (無). Therefore, they cannot be considered identical.

6.3 Its origin, and function as well as some cross-linguistic comparison

Remember that *bô* (無) itself is never a licit tag question form in TSM (see (21)). The only way in which it can be used interrogatively is as an echo question toward a sentence negated by *bô* (無) (see (22)). This is supposedly where the usage of *bô* (無) in question originated; note that this element alone, as an echo question, can be attached to a phrase corresponding to a previous sentence that is negated by *bô* (無).

(31) A: Guán pîng-iú, i bô kā lí phiàn. (TSM)
my friend he NEG PREP you cheat
阮 朋友 伊 無 共 你 騙
"As for my friend, he did not cheat you."
B: Lín pîng-iú bô[24]?
your friend BO
恁 朋友 無
"Are you sure that your friend did not cheat me?"

From an echo question used to interrogate the proposition's content with doubt, this element was then grammaticalized into a marker used to interrogate the addressee's epistemic state with a speaker attitude. Since the interrogation is not carried out at the at-issue level, this element no longer functions like a question particle or a tag question at the at-issue level; moreover, it has even lost its at-issue negator status (as illustrated in (27)). All in all, it has turned into a discourse marker contributing on not-at-issue level.

Though lacking historical documentation as evidence, this grammaticalization process is indirectly supported by the existence of the deferential evidential in some other languages. See the following examples:

(32) a. Wape'k. (Mi'kmaq; Inglis 2003:194-195 (1)-(4))
white
"It is white." (neutral)
b. I'-wape'kɨp na amskwes.

PAST-white.EVI PRT before

"It used to be white before." (attestive)

c. I'-wape'kis.

PAST-white.EVI

"It used to be white, so I'm told." (suppositive)

d. I'-wape'ksip.

PAST-white.EVI

"It used to be white, was it not?" (deferential)

In contrast to the plain declarative and sentences with other evidential flavors, the deferential evidential marking in (32)d gives rise to an interpretation such as, "I might be getting my information from somebody else to tell you the fact." Despite the English translation having a tag question, the corresponding Mi'kmaq sentence has no change in intonation which is expected in Mi'kmaq questions; on the contrary, just as a declarative, the example sentence has no change in intonation.

As pointed out by Ingris (2003:196), many languages have an invariant question tag that can be added to almost any declarative statement. The function of these question tags is similar to that of the Mi'kmaq deferential evidential, such that both are employed to confirm with the addressee whether a statement is true or false and/or to elicit information. The deferential evidential marking in this language, therefore, supports the claim that the usage of *bô* (無) in TSM originated in its use as an echo question.

Interestingly, in some Italian dialects, the pro-sentence *no* is also used in an evidential construction and occurs sentence-initially, -finally, or intra-sententially.

(33) a. No ghe vado **no**! (Veneto; from Poletto 2008:181 (3) and (5))

not there go **no**

"I won't go there."

b. **No** che non ghe vado!

no that not there go

"I won't go there."

As pointed out by Poletto, this usage of *no* is similar to an evidential that includes the speaker and the addressee, who both have evidence of the fact that the event is being negated. The exemplifying sentences above, according to Poletto, have the same

meaning and pragmatics, which can be paraphrased as, "Why are you asking me whether I'm going? It is self-evident to me, and it should be to you as well." In other words, the meaning and pragmatics underline that the (negative) answer should be self-evident to the interlocutor as it is to the speaker.

Despite the similarity, based on Poletto (2008), there are at least three differences between the usage of *no* in Veneto and other Italian dialects and *bô* (無) in TSM, as discussed herein.

Firstly, when *no* occurs at the very beginning of the clause, it has to be followed by a complementizer. Secondly, *no* can only be used in a negated sentence. When the sentence is positive, *no* has to be replaced with its positive counterpart *sì*, though the positive sentence with *sì* also has an evidential meaning and an identical distribution. See the examples in the following.

(34) a. Ci vado **sì**. (Regional Italian; Poletto 2008:182 (6) and (7))
there go **yes**
"I will go there indeed."

b. **Sì** che ci vado.
yes that there go
"I will go there indeed."

Thirdly, if Poletto's observation that the position of *no/sì* does not alter the meaning or pragmatics is correct (2008:181), then we have another point contrary to *bô* (無), which does bring in subtle differences when it occurs in a different position within the sentence.

Assuming *no* is always located in the same syntactic position and has the same properties regardless of its distribution, Poletto (2008) suggests that this *no*—a negative focus marker, as evidenced by its preceding the complementizer in FinP (see (33)b)—is moved and surfaces under FocusP from NegP. Regarding the sentence's evidentiality, she proposes that it is derived from the verb being moved to EvidModP. Due to IP or part of IP being topicalized to GroundP, *no* may occur in different positions, as Poletto claims.[89]

[89] According to her analysis, the distribution of *no* is supposed to result in different meanings and pragmatics for the sentence, in contrast to her claim (2008:181).

Note that, based on Poletto's analysis, though this usage of *no* conveys an attitude that the speaker is uttering his/her surprise at the fact that his/her interlocutor is asking for a piece of information that is self-evident to the speaker and should be to the interlocutor as well, and the evidential character of this structure provides the effect of "reinforcing" negation, *no* is not itself an evidential marker.

Following the tests applied to *no* in Poletto's analysis (2008:191-192), we may also see that the structure involved in the *bô* (無) in question is evidential, as examined below, before we discuss the characteristics of this evidentiality.

As regarding evidentials, based on Roorick's (2001: 125) definition, they indicate both the source and reliability of information, and they put in perspective or evaluate the truth value of a sentence, both with respect to the source of the information contained in the sentence and with respect to the degree in which this truth can be verified or justified.

Firstly, according to Roorick, only evidentials whose source of information involves the speaker can be surprisals. From all of the examples presented so far, we can see the link between evaluation by the speaker and the attitude of being surprised, paraphrased as "How can you not be aware of such an evident fact?" in the construction containing the usage of *bô* (無).

Secondly, evidentials are typical of spoken language and tend to disappear when a language is written. Again, just like the constructions with *no*, this usage of *bô* (無) is typical of the spoken and colloquial language but seldom spotted in the written register.[90]

The third point, probably the strongest of all, is that *no* and *bô* (無) are not compatible with some specific sorts of evidentials. According to Poletto, *no* triggers an evidential structure in which the speaker has direct evidence for an event; therefore, the structure is incompatible with adverbs that express a different evidential value. Consider the example below.

[90] I skipped Poletto's third argumentation about Cinque's (1999) assumption that an evidential's default value is that of the speaker because it is not clear to me how this can buttress the construction's evidential status. Moreover, the structure containing *bô* (無) involves not only the speaker but also the addressee and therefore is not parallel to the construction of *no* in this aspect. I will turn to the nature of such a kind of evidentiality later.

(35) * Apparentemente Gianni non è arrivato **no**.
allegedly Gianni not is arrived **no**
(Regional Italian; Poletto 2008:192 (36))

On the other hand, *bô* (無) is only compatible with *bîng-bîng* (明明) "obviously" and not *ká-ná* (敢若) "seemingly," as illustrated in the following:

(36) a.* Tsa-hng ká-ná ū lo̍h-hōo bô. (TSM)
yesterday seemingly have rain BO
昨昏 敢若 有 落雨 無
(Intended) "Regarding that it seemed to rain yesterday, I know it, and I suppose you also know it. (Don't tell me you don't know it.)"

b. Tsa-hng bîng-bîng ū lo̍h-hōo bô.
yesterday obviously have rain BO
昨昏 明明 有 落雨 無
"Regarding that it is obvious that it rained yesterday, I know it, and I suppose you also know it. (Don't tell me you don't know it.)"

The selecting of evidential value demonstrated by this contrast tells us that *bô* (無) is evidential because it can only co-occur with the evidential adverb that denotes a compatible meaning with it.

Fourth and last, as noted by Poletto and many researchers, evidentials display restrictions in embedded domains. Just as Poletto found about *no* (except verbs like "say" and "think"; see (37)), remember that the construction of the usage of *bô* (無) belongs to MCP, as illustrated in (28). All in all, based on their interpretations and the examined characteristics, both the constructions containing *no* and *bô* (無) are evidential.

Nevertheless, it is noteworthy that *bô* (無) does not perform the first-person restriction observed with verbs like "think," as pointed out by Poletto (2008:193):

(37) a.* Crede che non venga **no**. (Poletto 2008:193 (36))
(he) thinks that not comes no
b.* Credi che non venga **no**.

(you) think that not comes no

c. Crediamo che non venga **no**.
we.think that not comes no

Contrary to (37)c, in which the person of the main verb that embeds a clause with *no* is a first person (it can be either singular or plural), the other two sentences are ungrammatical. Poletto accounts for this by suggesting that the speaker must be involved in evaluating the event's truth value because this is the core of the evidentiality character. Compare the examples above with the ones with *bô* (無):

(38) a.* I siūnn-kóng **bô** i ē lâi. (TSM)
he think BO he will come
伊 想講 無 伊 會 來
(Intended) "He thinks it is obvious that he will come, and this thing is known by me and supposedly also known by you, and I don't expect you deny it."

b.* Lí siūnn-kóng **bô** i ē lâi.
you think BO he will come
你 想講 無 伊 會 來
(Intended) "You think that that he will come, and this thing is known by me and supposedly also known by you, and I don't expect you deny it."

c.* Guá siūnn-kóng **bô** i ē lâi.
I think BO he will come
我 想講 無 伊 會 來
(Intended) "I think that he will come, and this thing is known by me and supposedly also known by you, and I don't expect you deny it"

In these examples, *bô* (無) is put clause-initially to avoid it from getting a matrix scope. Regardless of the subject's person in the matrix clause, embedding *bô* (無) always results in ungrammaticality. This spares us from explaining the person contrast as observed with *no*; additionally, the strong MCP hallmark further supports the evidentiality of this *bô* (無) in question.

Notice that the evidential construction with *no* in Veneto, according to Poletto, expresses a commentary meaning on the proposition because "it is self-evident to me, and it should be to you as well." That is to say, this construction underlies that the proposition's content should be self-evident to the interlocutor as it is to the utterer. This is also the connotation conveyed in the sentence with *bô* (無) as discussed herein. The involvement of both the addressee and the speaker poses a question to the evidential status of these constructions, if we follow the conventional definition of evidentiality.

Traditionally, evidentials have been defined as grammatical markers that the speaker uses to specify an information source, such as sensory perception, inference, assumptions, and secondhand accounts (e.g., Aikhenvald 2004, among many others). Under such a definition, should we categorize the usage of *bô* (無) in question as evidential, since it includes the addressee in the evidential connotation and, what is more, the addressee's involvement even surpasses that of the speaker?

Recent studies of evidentiality have pointed out that there are evidentials attending to the addressee's perspective. Here are some examples from different languages ((39) is from Willett 1991:165 cited in Bergqvist 2017):

(39) a. Añ mi'-ñi dyɨr ja'c jim na **sac** jir-Járax Cham.
1S there-PRE from DIR come SUB REK EXS-crab place
"I'm coming from a place over there called 'Crab Place' [as you already know]." (Southeastern Tepehuan)

b. Ma'n mu-pai' **sap** quio gu ma'ncam.
one there-where REU live ART person
"(It is told that) there once lived a man in a certain place. [informing]"

In these two sentences, both *sac* and *sap* are reportative evidential markers; however, they differ in that the former presumes the proposition is known to the hearer but the latter presumes it is unknown to the hearer (Bergqvist 2017:6).

On the other hand, there are also evidentials signaling information that "any adult native member of the community would know." Compare the following two sentences:

(40) a. Ta-tukwin ʔaik-tu tau-Ø-**nta**-wa.
PS1-father.in.law-FNS field-FNS chop-S3-GKN-DECL
"My father-in-law is clearing a field (everyone knows this because he's been doing this every day now for a month)." (Mamaindê; Bergqvist 2017:7 (2))

b. Ta-tukwin ʔni-tu tau-**satau**-Ø-nha-wa.
PS1-father.in.law-FNS field-FNS chop-RS-S3-PRS/NVIS-DECL
"My father-in-law is clearing his field (and I know this because someone told me)." (Bergqvist 2017:7 (3))

According to Bergqvist, unlike the reportative evidential in (40)b, the general knowledge evidential in (40)a references the addressee's knowledge in stating something known, and the marker's evidential value extends beyond the speaker's perspective to include others, including the addressee.

Furthermore, some evidentials even attend to the addressee's perspective as an evidential value in qualifying an utterance. These include the reconfirmational marker *-pi* in Aymara, which is used when the addressee knows or ought to know, through personal knowledge, the matter referred to and the speaker (Hardman 1986:121) as well as the marker *-ishi* in Jaquru, which denotes a fact that is directly within the personal knowledge of both the speaker and hearer. Some other instances of this kind, like the referential aspect marker *-nde* in Pole and the suffix *-nda* in Mendi (Madden 1960 cited in Bergqvist 2017), the Quechua evidentials discussed in Hintz & Hintz 2017, and the Shishan particle *ey* studied in Strauss & Xiang 2009.

Below is a pair of dialogue examples in Duna from San Roque (2008) that contrast the potential observation marker *-noko/-naoko* to the direct visual evidential marking.

(41) A: Petrusi ho-**naoko**. (Duna)
PSN come-POT.OBS
"Petrus came [you could have seen]."

B: Hutia
come.PFV.VIS.P
"Yes, that's right, Petrus came [I saw]."

As pointed out by Bergqvist (2017:8), such markers are attested in genealogically diverse languages and are defined by their capacity to signal the inclusion of the addressee's point of view as a form of evidential marking. Based on these observations, suggesting the usage of *bô* (無) in TSM as an evidential marker should not be deemed a novel and odd claim at all.[91]

In sum, the *bô* (無) in question is an evidential of mutual knowledge (Hintz & Hintz 2017) and is the TSM counterpart of many others attested cross-linguistically. In addition to its evidentiality, it is also attitudinal.

6.4 The syntactic analysis

To begin with the henceforth topmost projection, the SA shell, we compare the relative positions between the evidential *bô* (無) and it.

(42) Guá leh lí leh bô Tsuí-sūn tsa-hng thèh tsînn hōo --lí.
I LEH you LEH BO Tsuisun yesterday take money give you
我 咧 你 咧 無 水順 昨昏 提 錢 予 你
(Mài kā guá tènn m̄-tsai.) (TSM; saP > *bô*^{EVI})
do.not APP me pretend NEG-know
莫 共 我 佯 毋知
"This is about you and me! I know, and I suppose you also know, that Tsuisun gave money to you yesterday. (Don't tell me you don't know it.) (Don't pretend that you don't know it.)"

(43) * Bô guá leh lí leh Tsuí-sūn tsa-hng thèh tsînn hōo --lí.
BO I LEH you LEH Tsuisun yesterday take money give you
無 我 咧 你 咧 水順 昨昏 提 錢 予 你
(Mài kā guá tènn m̄-tsai.)
do.not APP me pretend NEG.know (TSM; **bô*^{EVI} > saP)
莫 共 我 佯 毋知

[91] Cognitively, the existence of evidentials of mutual knowledge or general knowledge should not be surprising based on social neuroscience research, especially under the theory of mind, which is the ability to attribute mental states, like beliefs, intents, desires, pretending, knowledge, etc., to oneself and others and to understand that others have beliefs, desires, intentions, and perspectives that are different from one's own (Premack & Woodruff 1978).

Without any surprise, the evidential *bô* (無) can only follow the SA shell.

Besides, the discourse contrastive connective *ah* (啊) is also higher than this element, as demonstrated below:

(44) Ah bô Tsuí-sūn tsa-hng thèh tsînn lâi hōo --lí. (Lí
AH BO Tsuisun yesterday take money come give you you
啊 無 水順 昨昏 提 錢 來 予 你 你
thài ē kóng bô!) (TSM)
how.come will say no
呔 會 講 無
"(Contrary to your thought that no one will ask,) I know, and I suppose you also know, that Tsuisun gave money to you yesterday. (Don't tell me you don't know it.) (How come you denied it?)"

(45) * Bô ah Tsuí-sūn tsa-hng thèh tsînn lâi hōo --lí. (Lí
BO AH Tsuisun yesterday take money come give you you
無 啊 水順 昨昏 提 錢 來 予 你 你
thài ē kóng bô!) (TSM)
how.come will say no
呔 會 講 無

Based on these two pairs, we can learn the following order of sequence:

(46) SA.shell > dtP > *bô*^{EVI}

However, the sequencing task then runs into a problem when it comes to the commenting-verum focus and dictum focus marker (refer to chapter 4). Consider these examples:

(47) Commenting-verum focus *sī* (是)

a.* Bô Tsuí-sūn sī hó-ka-tsài tsa-hng ū lâi. (TSM)
BO Tsuisun FOC fortunately yesterday have come
無 水順 是 好佳哉 昨昏 有 來
(Intended) "I know, and I suppose you also know, that it is fortunate that

Tsuisun came. (Don't tell me you don't know it.)"

b.* Tsuí-sūn sī hó-ka-tsài bô tsa-hng ū lâi.
Tsuisun FOC fortunately BO yesterday have come
水順 是 好佳哉 無 昨昏 有 來
(Intended) "I know, and I suppose you also know, that it is fortunate that Tsuisun came. (Don't tell me you don't know it.)"

(48) Dictum focus *sī* (是)

a.* Bô tshun-thinn sī tiānn-tiānn ē lo̍h-hōo... (TSM)
BO spring FOC frequently will rain
無 春天 是 定定 會 落雨
(Intended) "I know, and I suppose you also know, that (all people suppose) it frequently rains in spring. (Don't tell me you don't know it.)"

b.* Tshun-thinn sī tiānn-tiānn bô ē lo̍h-hōo…
spring FOC frequently BO will rain
春天 是 定定 無 會 落雨
(Intended) "I know, and I suppose you also know, that (all people suppose) it frequently rains in spring. (Don't tell me you don't know it.)"

The sentences are not good with either this order or the inversed one. Hence, we learn that this should be a problem of incompatibility.

In fact, the co-occurrence problem is not limited to the two aforementioned focus markers. A subject-focus, an adjunct-focus, and a predicate-focus, as termed by Lee (2005), are all incompatible with the evidential *bô* (無). See the sentences below:

(49) a.* Bô sī Tsuí-sūn bîn-á-tsài beh lâi. (TSM)
BO FOC Tsuisun tomorrow will come
無 是 水順 明仔載 欲 來
(Intended) "I know, and I suppose you also know, that it is Tsuisun who will come tomorrow. (Don't tell me you don't know it.)"

b.* Tsuí-sūn bô sī bîn-á-tsài beh lâi.
Tsuisun BO FOC tomorrow will come
水順 無 是 明仔載 欲 來
(Intended) "Regarding Tsuisun, I know, and I suppose you also know, that it

is tomorrow that he will come. (Don't tell me you don't know it.)"

c.* Tsuí-sūn bô bîn-á-tsài sī beh lâi.
Tsuisun BO tomorrow FOC will come
水順 無 明仔載 是 欲 來
(Intended) "Regarding Tsuisun, I know, and I suppose you also know, that it is true that he will come tomorrow. (Don't tell me you don't know it.)"

Remember that the evidential *bô* (無) is not compatible with polarity questions (see (20)) either. The incompatibility is found in *wh*-questions, too. By way of example:

(50) a.* Siánn-lâng beh lâi bô? (TSM)
who will come BO
啥人 欲 來 無
(Intended) "Who will come? I know, and I suppose you also know, who will come. (Don't tell me you don't know it.)"

b.* Tsuí-sūn tī tó-uī bô?
Tsuisun PREP where BO
水順 佇 佗位 無
(Intended) "Where is Tsuisun? I know, and I suppose you also know, where Tsuisun is. (Don't tell me you don't know it.)"

c.* Sī-án-tsuánn Tsuí-sūn tī tsia bô?
why Tsuisun PREP here BO
是按怎 水順 佇 遮 無
(Intended) "Why is Tsuisun here? I know, and I suppose you also know, why Tsuisun is here. (Don't tell me you don't know it.)"

The ungrammaticality tells us that the item in question is somehow not congruous with focus. We will return to this later.[92]

In (8), we saw the flexibility of the distribution of this element, whereas the flexibility is limited as shown below:

[92] Remember that *leh*^{3} (咧) requires a c-commanded *wh*-element and that it always occurs in the form of *wh*-questions. Consequently, we cannot and did not compare the relative positions of *leh*^{3} (咧) and the evidential *bô* (無) because they are not compatible at all.

(51) a. **Bô** Tsuí-sūn mê-nî beh khì Au-tsiu tshit-thô. (TSM)
BO Tsuisun next.year will go Europe have.fun
無 水順 明年 欲 去 歐洲 迫迸
"I know, and I suppose you also know, that Tsuisun will go on a tour to Europe next year. (Don't tell me you don't know it.)"

b. Tsuí-sūn **bô** mê-nî beh khì Au-tsiu tshit-thô.
Tsuisun BO next.year will go Europe have.fun
水順 無 明年 欲 去 歐洲 迫迸
"Regarding Tsuisun, I know, and I suppose you also know, that he will go on a tour to Europe next year. (Don't tell me you don't know it.)"

c. Tsuí-sūn mê-nî **bô** beh khì Au-tsiu tshit-thô.
Tsuisun next.year BO will go Europe have.fun
水順 明年 無 欲 去 歐洲 迫迸
"Regarding Tsuisun and next year, I know, and I suppose you also know, that he will go on a tour to Europe. (Don't tell me you don't know it.)"

d.* Tsuí-sūn mê-nî beh bô khì Au-tsiu tshit-thô.
Tsuisun next.year will **BO** go Europe have.fun
水順 明年 欲 無 去 歐洲 迫迸
(Intended) "Regarding Tsuisun and what he will do next year, I know, and I suppose you also know, that he will go on a tour to Europe. (Don't tell me you don't know it.)"

e.* Tsuí-sūn mê-nî beh khì **bô** Au-tsiu tshit-thô.
Tsuisun next.year will go BO Europe have.fun
水順 明年 欲 去 無 歐洲 迫迸
(Intended) "Regarding Tsuisun and where he will go next year, I know, and I suppose you also know, that he will go on a tour to Europe. (Don't tell me you don't know it.)"

f.* Tsuí-sūn mê-nî beh khì Au-tsiu **bô** tshit-thô.
Tsuisun next.year will go Europe BO have.fun
水順 明年 欲 去 歐洲 無 迫迸
(Intended) "Regarding Tsuisun and him going to Europe next year, I know, and I suppose you also know, that he will go on a tour there. (Don't tell me you don't know it.)"

g. Tsuí-sūn mê-nî beh khì Au-tsiu tshit-thô **bô**.
Tsuisun next.year will go Europe have.fun BO
水順 明年 欲 去 歐洲 迌迾 無
"Regarding Tsuisun going on a tour to Europe next year, I know it, and I suppose you also know it. (Don't tell me you don't know it.)"

h. Mê-nî **bô** Tsuí-sūn beh khì Au-tsiu tshit-thô.
next.year BO Tsuisun will go Europe have.fun
明年 無 水順 欲 去 歐洲 迌迾
"Regarding next year, Tsuisun will go on a tour to Europe at that time, I know it, and I suppose you also know it. (Don't tell me you don't know it.)"

The long list of instances above suggests that *bô* (無) can be anywhere between phrases except for inside the *v*P.

Where does the evidential *bô* (無) be externally merged, and how can the various word orders in (51), either grammatical or not, be accounted for?

Recall our discussion about its function as well as the cross-linguistic comparison in the previous section, especially Poletto's analysis of *no* in Veneto and Regional Italian. According to Poletto (2008), *no* is externally merged under NegP before it moves to FocP, and the evidentiality is a consequence of verb movement to the evidential phrase.

The reason why Poletto makes *no* irrelevant to evidentiality is that she pursues a unified analysis for *no*, regardless of whether it is used in an evidential construction or as a pro-form, which is not evidential, to answer a yes-no question.

Based on Lien 2015b, I can see no reason to also espouse a unified analysis for *bô* (無). Moreover, assuming TSM, just like MC, has no (overt) V-to-I movement, given the standard and prevalent assumption, we are left with no way to derive the evidentiality by proposing V-to-EvidentialP movement in TSM, as Poletto (2008) does in Veneto. Therefore, a more straightforward and elegant analysis for *bô* (無), which always occurs in a sentence with an evidential reading of mutual knowledge, would be to suggest that *bô* (無) is itself the evidential adverbial externally merged under

EvidentialP (EvidP) (Cinque 1999; Ernst 2008). This is what I will advocate in the following discussion.[93]

In addition to evidentiality, this element brings forth illocutionary force with a construal like "don't tell me you don't know," a sign of its interaction with AttitudinalP (AttP). This can be seen from the parallelism between the evidential *bô* (無) and the MC attitudinal adverb *dàodǐ* (到底) "*wh*-the-hell," which is housed under AttP, according to Huang & Ochi 2004: Both the evidential *bô* (無) and *dàodǐ* (到底) exhibit complex NP island effects.

(52) * Zhāngsān xǐhuān [dàodǐhuì shéme yuèqì de rén]?
Zhangsan like the-hell can what musical.instrument LK person
張三 喜歡 到底 會 什麼 樂器 的 人
(Intended) "What is the hell kind of musical instrument such that x can play and Zhangsan likes x?" (MC)

(53) * Tsuí-sūn kah-ì [bô[33] ē-hiáu bai-óo-lín ê lâng]. (TSM)
Tsuisun like BO can violin LK person
水順 佮意 無 會曉 bai-óo-lín 的 人
(Intended) "Tsuisun likes people who obviously can play violin.'

As for how the evidential *bô* (無) interacts with AttP, I suggest that *bô* (無) overtly moves to AttP. This claim is supported by two observations. Firstly, the evidential *bô* (無) is not obligatorily adjacent to the evidential adverbial *bîng-bîng* (明明) "obviously" (see (54)). Secondly, the incompatibility between the evidential *bô* (無) and focus elements, demonstrated from (47) to (50). Now, let's look into each of its surface positions individually.

In (51) and earlier in this chapter, we saw that the evidential *bô* (無) can surface in different positions within a sentence. This is what the first point is pertinent to. Regarding its surface positions, though I do not follow Poletto's analysis of *no*'s status in analyzing the evidential *bô* (無), her accounting for the different positions of *no* as resulting from IP or part of IP being topicalized to GroundP is informative. What is

[93] This proposal is supported by the co-occurrence constraint illustrated in (36).

interesting is that, under the assumption that the evidential *bô* (無) is the head of EvidP, whose spec can be optionally occupied by the adverb *bîng-bîng* (明明) "obviously," the evidential *bô* (無) quite often surfaces in a position that is either distant from the adverb *bîng*-bîng (明明) or in an unexpected inversed order contrary to the one of spec-heads, as shown in the following examples.

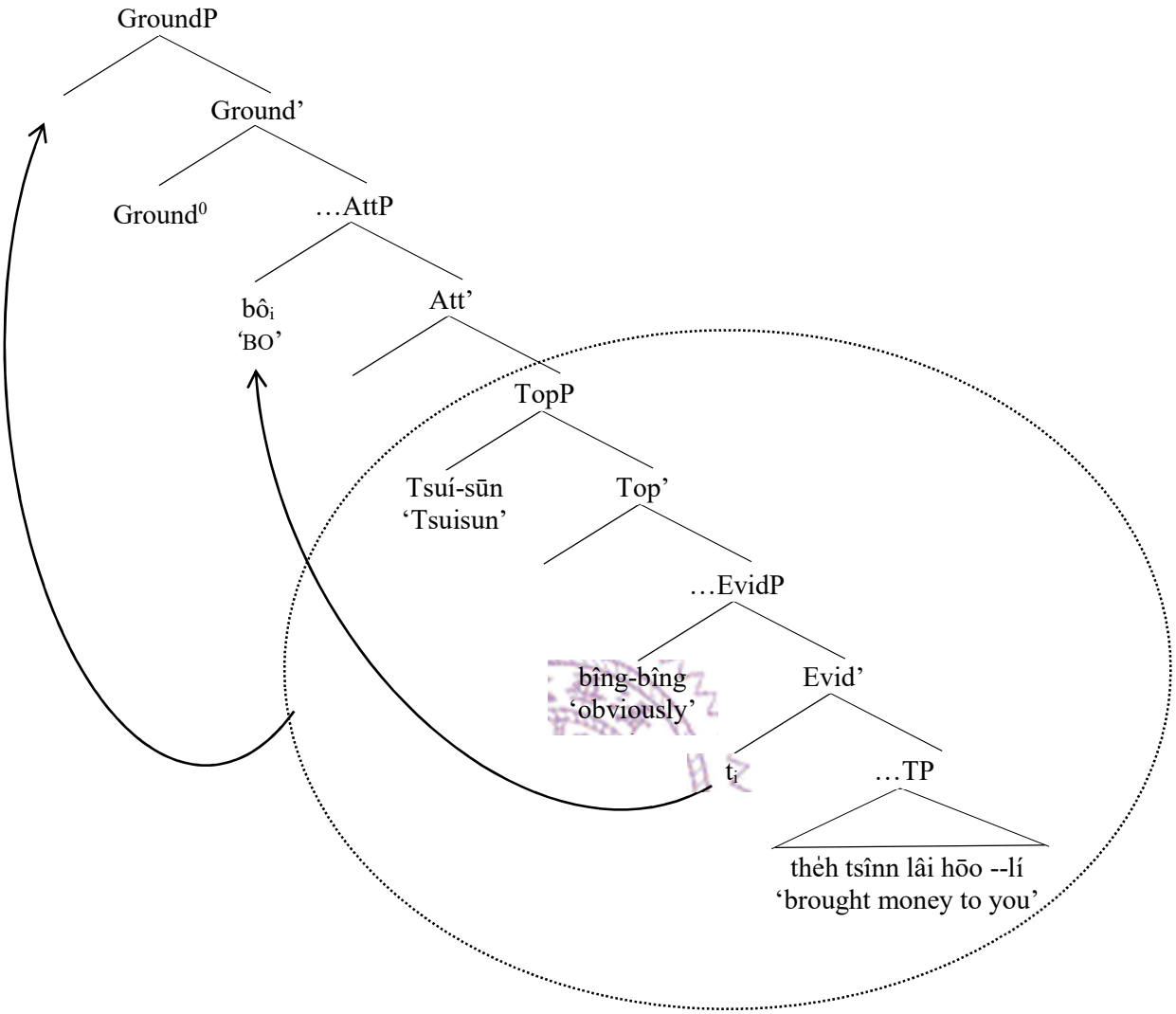
(54) a. Tsuí-sūn bîng-bîng the̍h tsînn lâi hōo --lí bô[24]. (TSM)
Tsuisun obviously take money come give you BO
水順 明明 提 錢 來 予 你 無
"Regarding the obvious fact that Tsuisun brought some money to you, this is known by me and also by you. (Don't tell me you don't know.)"

b. Tsuí-sūn bô bîng-bîng the̍h tsînn lâi hōo --lí.
Tsuisun BO obviously take money come give you
水順 無 明明 提 錢 來 予 你
"Regarding Tsuisun, it is known by me and also by you that, obviously, he brought some money to you. (Don't tell me you don't know.)"

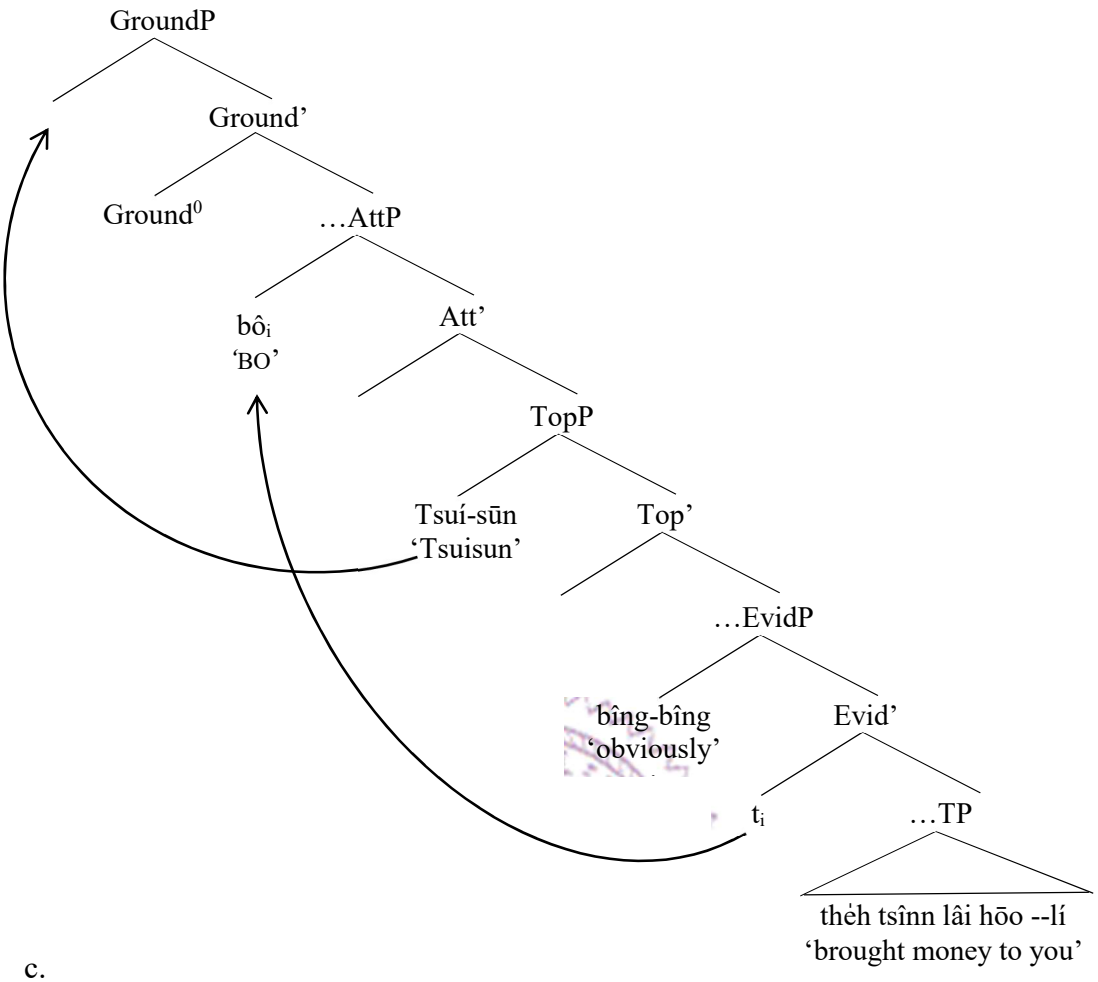
c. Bô Tsuí-sūn bîng-bîng the̍h tsînn lâi hōo --lí.
BO Tsuisun obviously take money come give you
無 水順 明明 提 錢 來 予 你
"It is known by me and also by you that, obviously, Tsuisun brought some money to you. (Don't tell me you don't know.)"

Given *bîng-bîng* (明明) "obviously" and *bô* (無) are both externally merged under EvidP, the more intuitive way to derive the word-order variation above is that *bô* (無) moves to AttP (resulting in (54)c) before the later remnant movement(s), which gives rise to (54)a or b. The derivations for each are depicted respectively as follows.

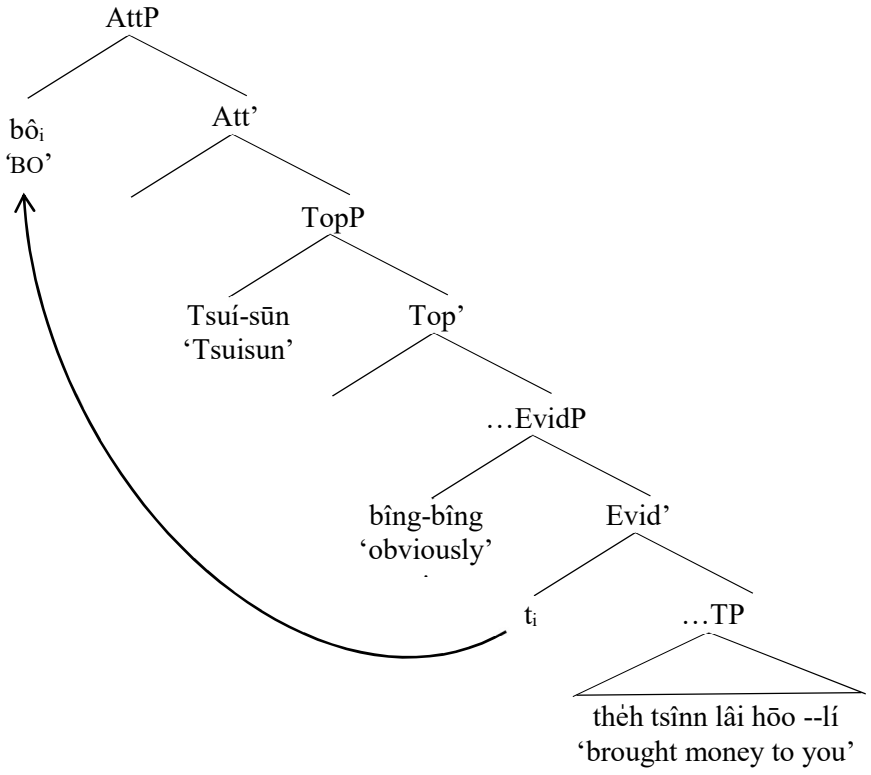
(55) a.


GroundP
Ground'
Ground⁰
…AttP
bôi
'BO'
Att'
TopP
Tsuí-sūn
'Tsuisun'
Top'
…EvidP
bîng-bîng
'obviously'
Evid'
ti
…TP
the̍h tsînn lâi hōo --lí
'brought money to you'

b.


GroundP
Ground'
Ground^{0}
…AttP
bôi
'BO'
Att'
TopP
Tsuí-sūn
'Tsuisun'
Top'
…EvidP
bîng-bîng
'obviously'
Evid'
ti
…TP
thèh tsînn lâi hōo --lí
'brought money to you'

c.


AttP
bôi
'BO'
Att'
TopP
Tsuí-sūn
'Tsuisun'
Top'
…EvidP
bîng-bîng
'obviously'
Evid'
ti
…TP
thèh tsînn lâi hōo --lí
'brought money to you'

The movement of the evidential *bô* (無) from EvidP to AttP is also evidenced by another observation: the incompatibility between this item and the focus elements (see the discussion regarding (47) to (50)). Note that there is no problem in an evidential co-occurring with a focus marker. Consider the following instances:

(56) a. Tsuí-sūn sī bîng-bîng bô tsiong lí khǹg tsāi gán-lāi.
Tsuisun FOC obviously NEG DISP you put in eye-inside
水順 是 明明 無 將 你 囥 在 眼內
"It is obvious that Tsuisun has absolutely no regard for you." (CVF; TSM)

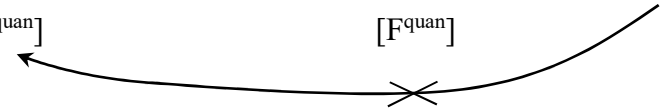
b. Bîng-bîng sī Tsuí-sūn tsò m̄-tio̍h, suah sī Gîn-khuân
obviously FOC Tsuisun do wrong unexpectedly is Ginkhuan
明明 是 水順 做 毋著 煞 是 銀環
teh tann. (subject-focus; TSM)
ASP bear
咧 擔
"Obviously, it is Tsuisun who is the wrongdoer, whereas unexpectedly, it is Ginkhuan who took the responsibility."

The contrast between the evidential *bô* (無) and its corresponding evidential adverb *bîng-bîng* (明明) "obviously" indicates they differ in syntax. By suggesting that the evidential *bô* (無) further moves to AttP, the incompatibility can be explained away by the intervening effect triggered by the mentioned movement crossing a focus projection,

which shares the same quantificational feature (Rizzi 2004).[94] See the following diagram:[95]

(57) …[$_{AttP}$ *bô*$_i$ [$_{Att'}$ … [$_{FocP}$ [$_{Foc'}$ Foc^0 … [$_{EvidP}$ [$_{Evid'}$ t$_i$ …

[F^{quan}] [F^{quan}]



If this explanation is on the right track, then we should be able to predict that the intervention effect will not be triggered by a focus lower than EvidP and that the sentence is supposed to be grammatical. This prediction is born out, as shown below:

(58) Tsuí-sūn ē kíng-tsiảh. I ti-bah tsiảh, gû-bah m̄-tsiah bô. (TSM)
Tsuisun will pick-food he pork eat beef NEG-eat BO
水順 會 揀食 伊 豬肉 食 牛肉 毋食 無
"Tsuisun is a picky eater. (I know, and I suppose you also know, that) He eats pork but not beef. (Don't tell me you don't know)."

Contrary to (47) to (50), this sentence, which has two objects contrasting each other and a presumably VP-internal focus, fares well with the evidential *bô* (無).

So far, this proposal has successfully accounted for the surface order in (51)a, b, c, g, and h. What about (51)d, e, and f, in which evidential *bô* (無) fails to be inserted lower than *v*P? Remember that the apparent insertion of the evidential *bô* (無) is actually the result of topicalizing part of IP. Based on the assumptions that *v*P is a phase

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[94] I argued in the last chapter that sentence-initial *ah* (啊) has to be licensed by some kind of focus feature in the following sentence. Note that the evidential *bô* (無) is qualified as a licensing element:

i) a.* Ah i bîn-á-tsài beh lâi. (TSM)
AH he tomorrow want come
啊 伊 明仔載 欲 來
(Intended) "(Contrary to what is supposed in this discussion, I know, and I suppose you also know, that) He will come tomorrow. (Don't tell me you don't know.)"

b. Ah i bîn-á-tsài beh lâi bô[24].
AH he tomorrow want come BO
啊 伊 明仔載 欲 來 無
"(Contrary to what is supposed in this discussion, I know, and I suppose you also know, that) He will come tomorrow. (Don't tell me you don't know.)"

The problem is that *bô* (無) itself is problematic when co-occurring with a focus marker. The ostensible conceptual conflict indicates that the feature involved in legalizing sentence-initial *ah* (啊) is neither a conventional focus feature nor a quantificational feature, as suggested by Rizzi. As aforementioned, I leave the issue of identifying this feature for future research.

[95] I do not follow Haegeman (2014) to identify the lower projection of the SA shell to AttP, for the data in TSM does not support her tentative hypothesis, as clearly shown from (42) to (45).

and that the phase impenetrability condition holds (Chomsky 2000), the absence of the evidential *bô* (無) in *v*P is naturally accounted for.

As for the MCP attribute of the sentences containing the evidential *bô* (無), with the analysis in which this element is externally merged under EvidP and then internally merged under AttP, all we need is to assume truncation for subordinate clauses. With this prevalent assumption, it is not unexpected that AttP can only be found in a matrix clause but not in truncated subordinates where the evidential *bô* (無) cannot be well accommodated.

Before we leave this section, in addition to the incompatibility between the evidential *bô* (無) and focus elements, I would like to point out another incompatibility between the evidential *bô* (無) and sentence-final particles (SFPs). Consider the following examples:[96]

(59) a. Bô Tsuí-sūn tsa-hng lâi tshuē --lí (* --neh/--oo/--ah…)
BO Tsuisun yesterday come look.for you PRT / PRT / PRT
無 水順 昨昏 來 揣 你 呢 / 喔 / 啊 (TSM)

b. Tsuí-sūn tsa-hng bô lâi tshuē --lí (* --neh/--oo/--ah…)
Tsuisun yesterday BO come look.for you PRT / PRT / PRT
水順 昨昏 無 來 揣 你 呢 / 喔 / 啊

c. Tsuí-sūn tsa-hng lâi tshuē --lí (*--neh/--oo/--ah…) bô
Tsuisun yesterday come look.for you PRT / PRT / PRT BO
水順 昨昏 來 揣 你 呢 / 喔 / 啊 無

d. Tsuí-sūn tsa-hng lâi tshuē --lí bô (*--neh/--oo/--ah…)
Tsuisun yesterday come look.for you BO PRT / PRT / PRT
水順 昨昏 來 揣 你 無 呢 / 喔 / 啊

(60) a. Bô Tsuí-sūn tsa-hng lâi tshuē --lí --ah. (TSM)
BO Tsuisun yesterday come look.for you ASP
無 水順 昨昏 來 揣 你 矣

[96] Do not confuse the sentence-final discourse particle *ah* (啊) with the sentence-final inchoative particle *ah* (矣), which is the near counterpart of sentence-final *le* (了) in MC. It is possible for *ah* (矣) and the evidential *bô* (無) to co-occur, with the former preceding the latter when both are sentence-final. See (60).

"I know, and you also know, that Tsuisun came to see you yesterday.
(Don't tell me you don't know.)"

b. Tsuí-sūn tsa-hng bô lâi tshuē --lí --ah.
Tsuisun yesterday BO come look.for you ASP
水順 昨昏 無 來 揣 你 矣
"Regarding Tsuisun, yesterday, I know, and you also know, that he came to see you yesterday. (Don't tell me you don't know.)"

c. Tsuí-sūn tsa-hng lâi tshuē --lí --ah bô
Tsuisun yesterday come look.for you ASP BO
水順 昨昏 來 揣 你 矣 無
"Regarding the fact that Tsuisun came to see you yesterday, I know, and you also know it. (Don't tell me you don't know.)"

d.*Tsuí-sūn tsa-hng lâi tshuē --lí bô --ah…
Tsuisun yesterday come look.for you BO ASP
水順 昨昏 來 揣 你 無 矣

So long as we have an evidential *bô* (無) in the sentence, wherever it is, no sentence-final particle—except for the inchoative *ah* (矣) that must precede it—can be in this sentence.

Though it is true that SFPs in TSM seldom go hand in hand in a sentence, there are still instances in which we can find two SFPs simultaneously. By way of example:

(61) a. Tsuí-sūn lâi --ah nih --ah? (TSM)
Tsuisun come ASP Q PRT
水順 來 矣 nih 啊
"(Listen! I'm asking you!) Has Tsuisun arrived?"

b. Tsuí-sūn ū lâi --bô^{0} --ah?
Tsuisun have come Q PRT
水順 有 來 無 啊
"(I do want to know it!) Did Tsuisun come?"

To this point, I have no answer to the question of why we have the incompatibility in (59), and I leave it open for future research.

6.5 The semantic analysis

From the discussion in section 6.3, we learned that the element *bô* (無) in question is an evidential marker denoting the at-issue proposition content as being self-evident to the interlocutor as it is to the utterer; that is to say, it is an evidential of mutual knowledge. Additionally, this element is also attitudinal, conveying a connotation like "don't tell me you don't know it."

The meaning of this element indicates that, as an evidential, *bô* (無) is among the non-modal evidentials that do not contribute to the truth conditions at the at-issue level, contrary to the modal evidentials that do. In the literature, the former kind is treated as illocutionary force operators (e.g., Faller 2002; Portner 2006; and Davis et al. 2007), and the latter kind is compared to epistemic modals (e.g., Izvorski 1997; Matthewson et al. 2007; von Fintel and Gillies 2010).

As for the attitudinal connotation "don't tell me you don't know it," it is noteworthy that this should be taken as an implicature because it is possible to be overridden. By way of example:

(62) A: Guá ê phāinn-á ná ē bô --khì --ah? (TSM)
I POSS handbag how.come will not.have ASP ASP
我 的 揹仔 哪 會 無 去 矣
"How come my handbag is gone?"

B: Lí ê phāinn-á tī hia bô[24]! Lí ka-kī tú-tsiah hē
you POSS handbag PREP there BO you self a.moment.ago put
你 的 揹仔 佇 遐 無 你 家己 拄才 下
tī hia --ê, suah ảh ē bē-kì --tit.
PREP there PRT unexpectedly PRT will forget can
佇 遐 的 煞 曷 會 袂記 得
"Regarding the fact that your handbag is over there, I know it, and I suppose you also know it. (Don't tell me you don't know it!) You left it there just a moment ago. It's so incredible that you forgot it then."

In this instance, after B utters the sentence containing the evidential *bô* (無), with the connotation "don't tell me you don't know it," it is added that for A to forget where he left his handbag in such a short period is incredible. The felicity of supplementing this

comment on A's forgetfulness indicates that B acknowledges A's temporary ignorance of the location of his handbag. Consequently, the attitudinal connotation "don't tell me you don't know it" is cancelled in this case.

To state the denotation of the evidential *bô* (無), I refer to Faller's (2002:159-168) formulation, and the meaning of the element in question is given as follows:

(63) $[\![bô^{EVI}]\!] = \lambda p_{<s,t>}.\ Bel(x, p \wedge Bel(y, p)) +> Bpg(y, Bel(y, p))$

x: speaker; y: addressee; +>: the symbol for implicature

Bel(z, q): the belief predicate (individual z has the belief toward proposition q)

Bpg(z, q): a higher order predicate on propositional attitude that z has the best possible grounds

What (63) says is that the evidential *bô* (無) takes a proposition as its argument and that its truth conditions are satisfied when the speaker's belief is composed of the proposition being true and the addressee's believing the same proposition. Additionally, there is an implicature that the addressee has the best possible grounds regarding the truth of this proposition. The implicature part is meant to correspond to the speaker's attitude, paraphrased as "don't tell me you don't know it,", and it can be cancelled by the speaker. In addition to (62), this can also be illustrated by the following example:

(64) A: Kā guá ê pit thèh hōo --guá. (TSM)
DISP I POSS pen take to I
共 我 的 筆 提 予 我
"Pass me my pen."

B: Lí ê pit tī lí ê lak-tē-á bô! Guá khuánn lí
你 的 筆 佇 你 的 橐袋仔 無 我 看 你
you POSS pen PREP you POSS pocket BO I see you
í-king bô-îng kah liân ka-kī kā pit hē tī
已經 無閒 甲 連 家己 共 筆 下 佇
already busy RES even self DISP pet put PREP
tó-uī to bē-kì--tit --ah.
where PRT forget ASP
佗位 都 袂記得 矣

"(I know it, and I suppose you should also know it.) Your pen is in your pocket. It seems that you are too busy to even remember where you put your pen."

As shown in the short conversation above, in the reply from B, the "don't tell me you don't know" connotation is cancelled by B herself in the pursuing sentence. The cancellability supports us in identifying its nature as an implicature.

To cover all of the patterns that involve the evidential in question, we also have to consider the varied word orders derived from preposing part of or the whole sentence, as shown in (51). In section 6.4, the landing site of the preposed constituents is suggested to be GroundP, and the movement is categorized as topicalization.

With respect to the nature of this topicalization, I suggest that it is as a discourse topic (QUD; question under discussion) but not an utterance topic because the main motivation of the preposing is more about establishing or confirming the current discourse goal, which determines what is relevant, rather than directing the addressee's attention to some relevant discourse referent (refer to Roberts 2011). By placing a constituent before the evidential *bô* (無), the speaker marks the information conveyed by it as presumably being noticeable by the addressee in this context. The discourse nature of this topicalization in question is evidenced by the contrast demonstrated in the following:

(65) A: Guá ê ê-á --leh? (TSM)
I POSS shoe PRT
我 的 鞋仔 咧
"Where are my shoes?"

B-1: Lí ê ê-á tī hia bô!
you POSS shoe PREP there BO
你 的 鞋仔 佇 遐 無
"Regarding the fact that your shoes are over there, I know it, and I suppose you also know it. (Don't tell me you don't know.)"

B-2: Lí ê ê-á bô tī hia!
you POSS shoe BO PREP there
你 的 鞋仔 無 佇 遐
"Regarding your shoes, I know, and I suppose you also know, they are

over there. (Don't tell me you don't know.)"

B-3:# Bô lí ê ê-á tī hia!
BO you POSS shoe PREP there
無 你 的 鞋仔 佇 遐
"I know, and I suppose you also know, that your shoes are over there. (Don't tell me you don't know.)"

(66) A: Tsuí-sūn kám ū tshut --khì? (TSM)
Tsuisun Q have out go
水順 敢 有 出 去
"Has Tsuisun gone out?"

B-1: I/Tsuí-sūn bô tī pâng-king thȧk-tsheh!
he/Tsuisun BO PREP room read-book
伊/水順無 佇 房間 讀冊
"Regarding him/Tsuisun, I know, and I suppose you also know, that he is studying in his room. (Don't tell me you don't know.)"

B-2: I/Tsuí-sūn tī pâng-king thȧk-tsheh bô!
he/Tsuisun PREP room read-book BO
伊/水順佇 房間 讀冊 無
"Regarding the fact that he/Tsuisun is studying in his room, I know and I suppose you also know it. (Don't tell me you don't know.)"

B-3:# Bô i/Tsuí-sūn tī pâng-king thȧk-tsheh!
BO he/Tsuisun PREP room read-book
無 伊/水順佇 房間 讀冊
"I know, and I suppose you also know, that he/Tsuisun is studying in his room. (Don't tell me you don't know.)"

Interestingly, the already mentioned entity is obligatorily preposed, as shown by the contrast among (65)B-1, B-2, and (65)B-3 and among (66)B-1, B-2, and (66)B-3. This tells us that the preposed constituent(s) is discourse-oriented.

Based on these observations, I assume Ground^{0} to be a covert operator whose denotation is as follows:

(67) $[\![\text{Ground}^0]\!] = \lambda\beta.\ \lambda\alpha_1.\ \lambda\alpha_2.\ \lambda\alpha_3.\ \ldots\ [\![\alpha_1]\!] \in \text{QUD} \wedge [\![\alpha_2]\!] \in \text{QUD} \wedge [\![\alpha_3]\!] \in \text{QUD} \ldots$
$\wedge\ [\![\beta - \alpha_1 - \alpha_2 - \alpha_{3\ldots}]\!] \notin \text{QUD}$
α_i is a constituent preposed to spec.GroundP

Just like the evidential *bô* (無), this operator does not work at the at-issue level and only bears on t^c. Its truth-conditions require all of the preposed constituents' denotations to be discourse topics and the denotation of the rest of the proposition to not be discourse topics. When the operator is absent, no constituent will be preposed. In this same vein, if no constituent is preposed, the operator is assumed not to not inserted into the sentence.

With this denotation, the infelicity of the B-3 sentences in (65) and (66) can be explained away by their failure to meet the truth-conditions of Ground^0, in addition to the glitch caused by not preposing the constituent conveying the relevant feature in syntax (e.g., [topic]).

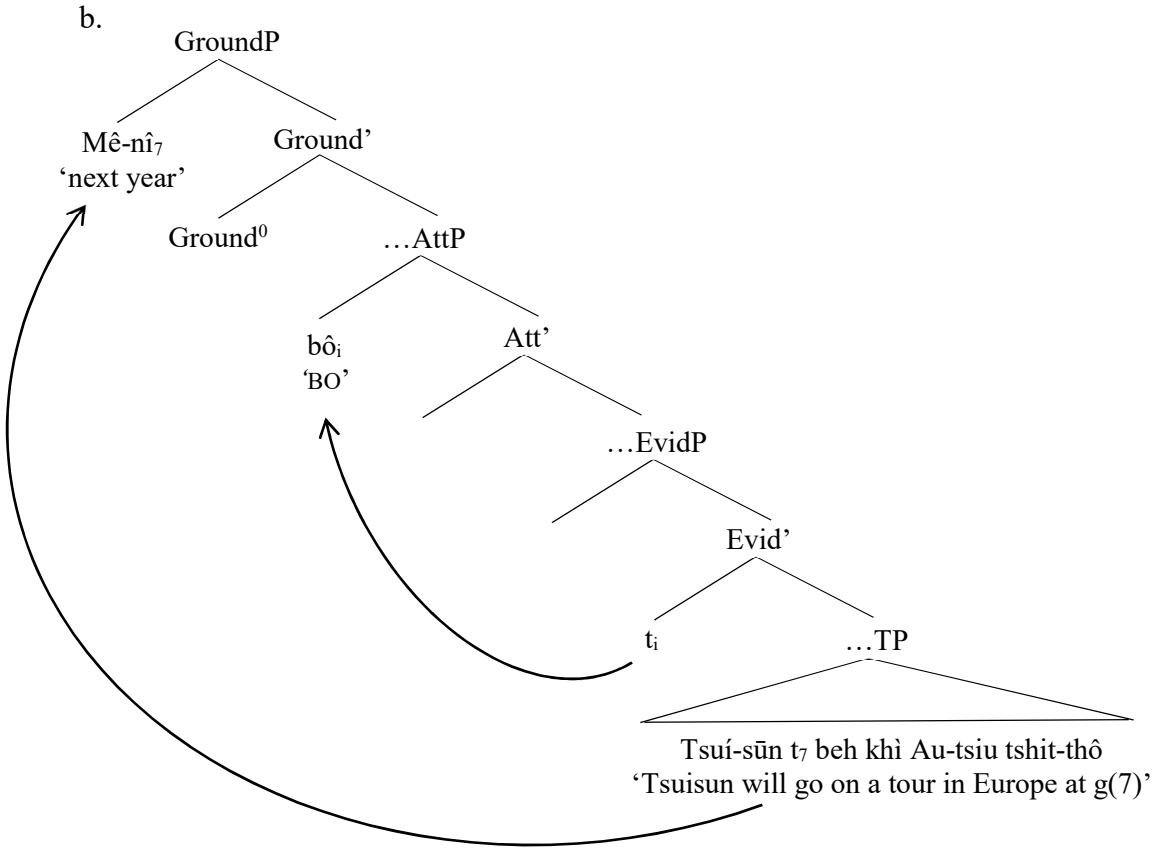
The computation of sentences containing the evidential *bô* (無) is demonstrated with (51)h, reproduced below: (Assume the trace of *bô* (無) is semantically vacuous.)

(68) a.

Mê-nî	**bô**	Tsuí-sūn	beh	khì	Au-tsiu	tshit-thô.	(TSM)
next.year	BO	Tsuisun	will	go	Europe	have.fun	
明年	無	水順	欲	去	歐洲	迫迌	

"Regarding next year, Tsuisun will go on a tour to Europe at that time—I know it, and I suppose you also know it. (Don't tell me you don't know it.)"

b.



c-1.

'Tsuisun will go on a tour to Europe at g(7) in w'
Tsuí-sūn t_7 beh khì Au-tsiu tshit-thô: ⟨*s, t*^{a}⟩
Tsuisun will go Europe have.fun

●

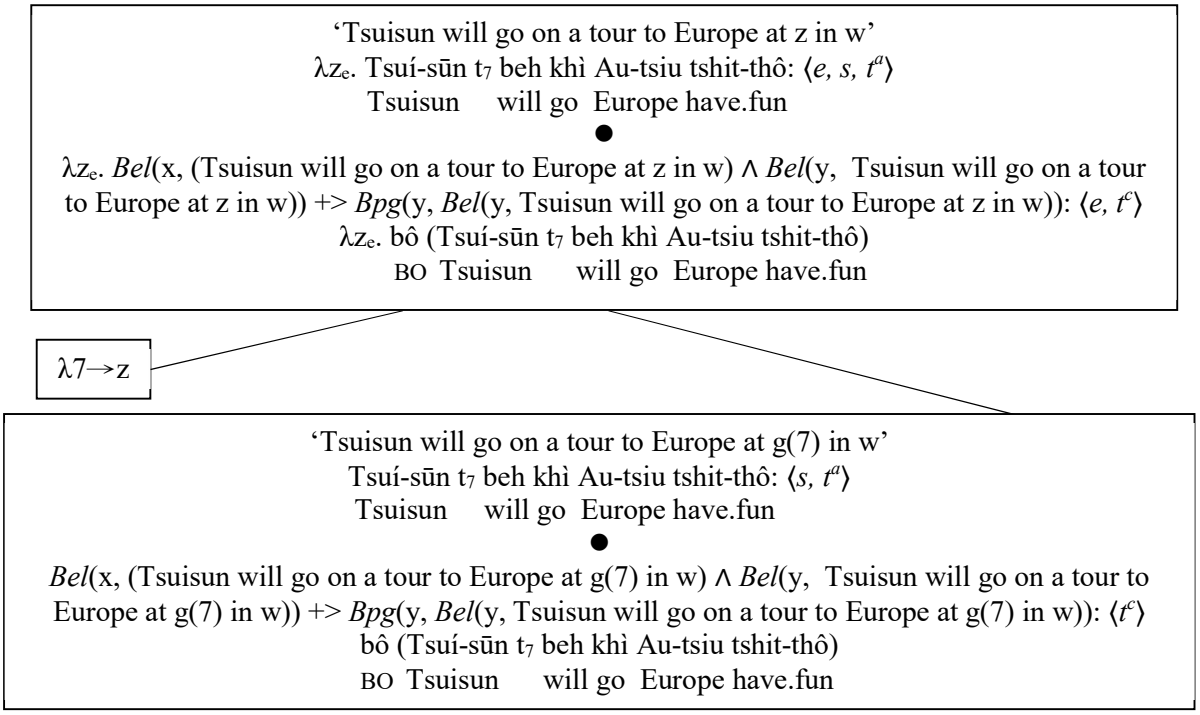
Bel(x, (Tsuisun will go on a tour to Europe at g(7) in w) ∧ *Bel*(y, Tsuisun will go on a tour to Europe at g(7) in w)) +> *Bpg*(y, *Bel*(y, Tsuisun will go on a tour to Europe at g(7) in w)): ⟨*t*^{c}⟩
bô (Tsuí-sūn t_7 beh khì Au-tsiu tshit-thô)
BO Tsuisun will go Europe have.fun

BO
$\lambda p_{<s,t>}$. *Bel*(x, p ∧ *Bel*(y, p)) +>
Bpg(y, *Bel*(y, p)): ⟨⟨*s*,*t*^{a}⟩, *t*^{c}⟩

'Tsuisun will go on a tour to Europe at g(7) in w'
Tsuí-sūn t_7 beh khì Au-tsiu tshit-thô: ⟨*s, t*^{a}⟩
Tsuisun will go Europe have.fun

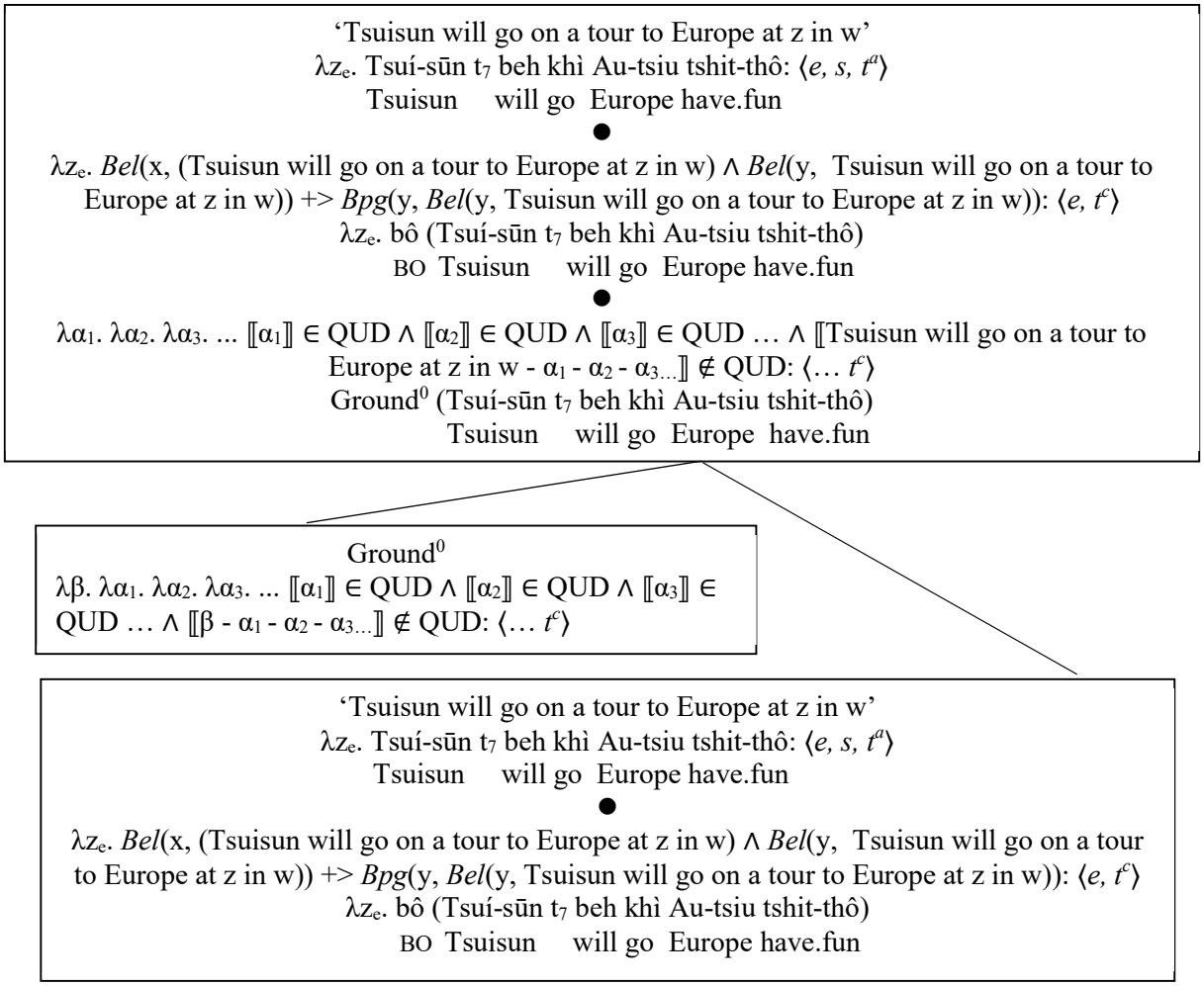
As in previous chapters, Potts's (2005) scheme is adopted, and the composition proceeds in a bottom–up fashion. In (68)c-1, the evidential *bô* (無) firstly applies to the proposition and contributes to the not-at-issue level, in addition to the proposition content at the at-issue level.

c-2.



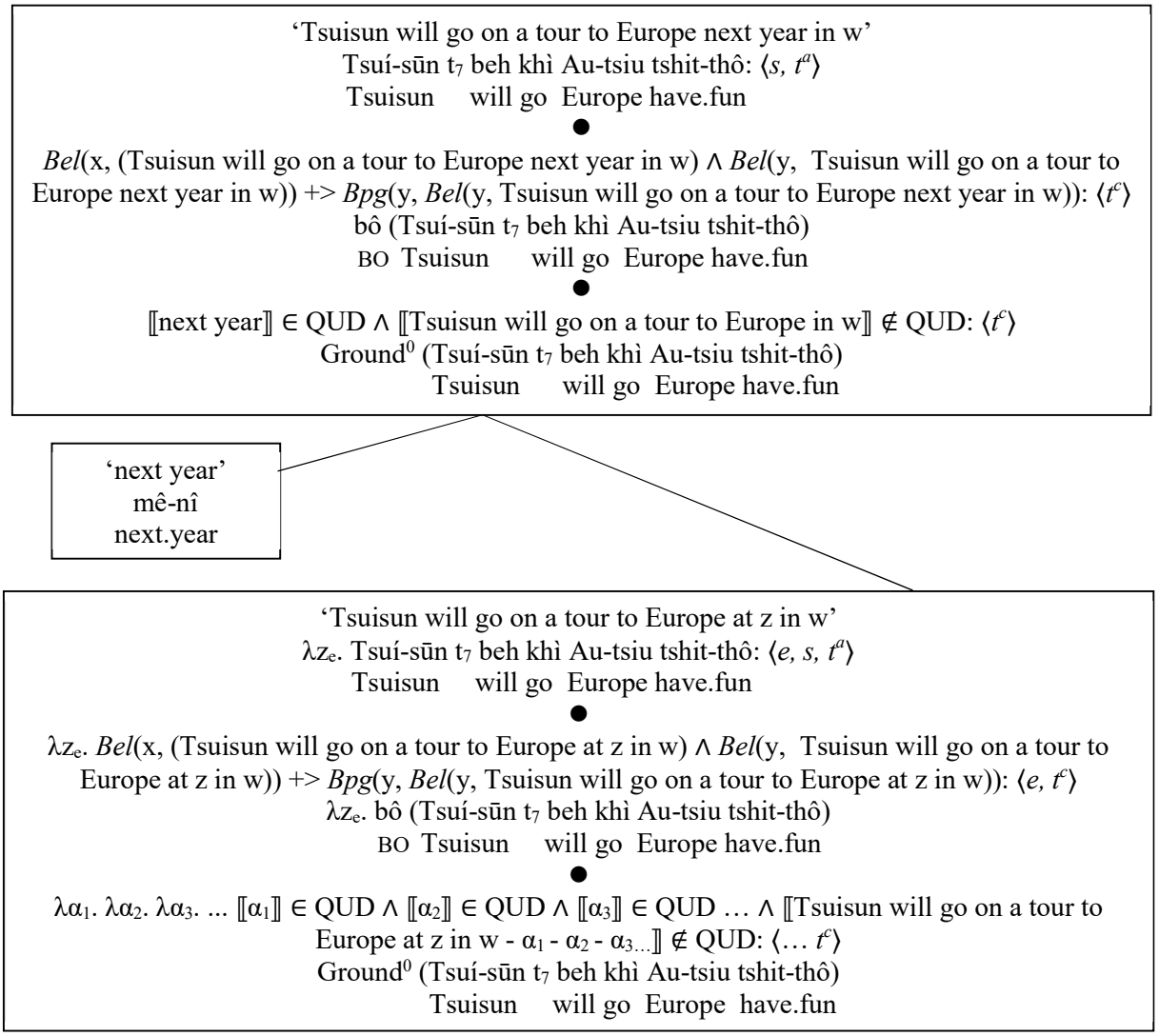
By predicate abstraction, the trace left by the topicalized temporal adverbial is assigned as an entity gap to be filled.

c-3.



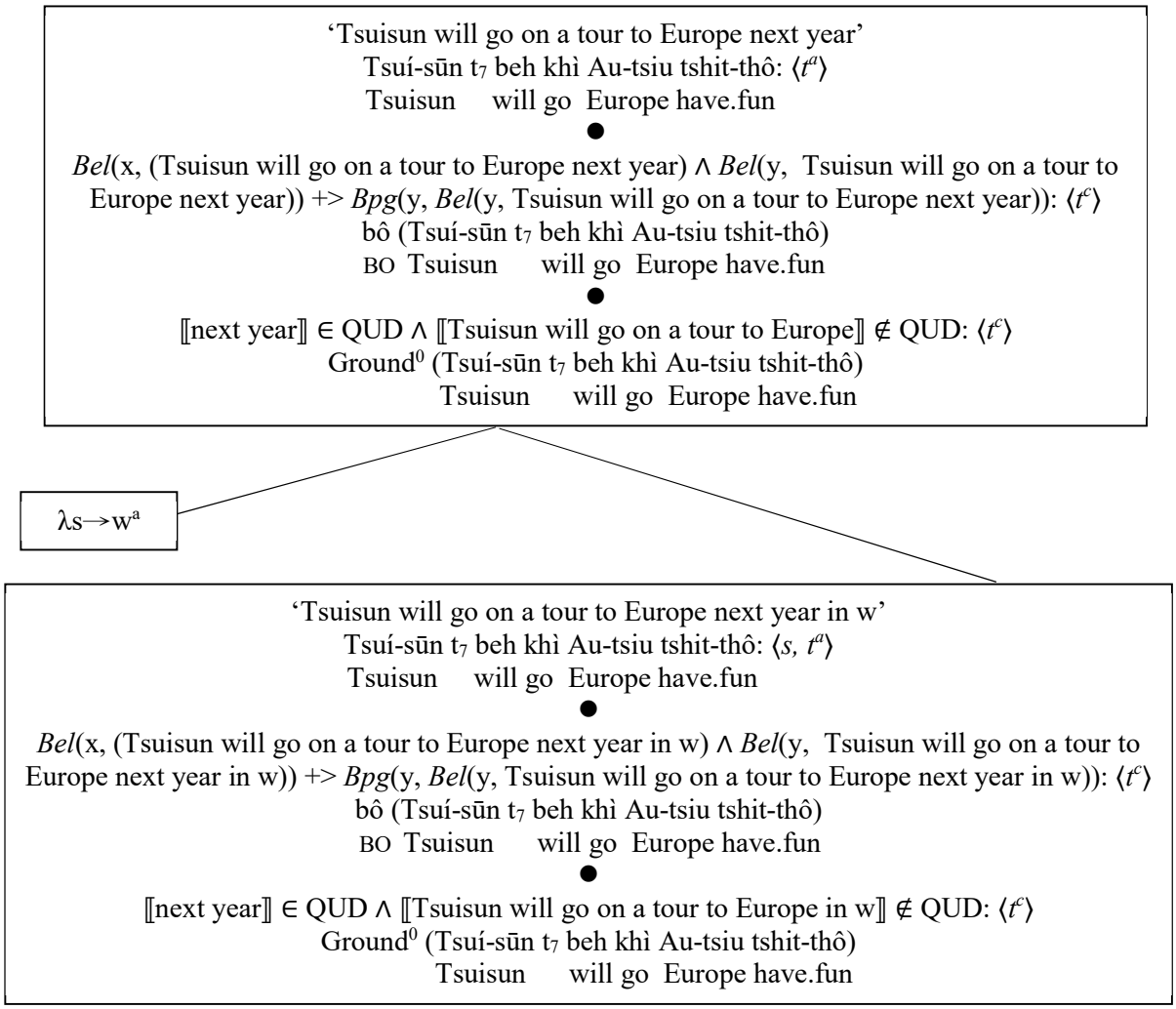
By taking the product of (68)c-2 as the first argument of Ground^0, we now have another layer of the not-at-issue level, excluding the content of the topicalization remnant from QUD, as shown at the bottom of the top box.

c-4.



In (68)c-4, we feed the topicalized temporal adverbial into the function of each layer and identify the time of the proposition at the at-issue level and the time information in the two comments at the not-at-issue level.

c-5.



As the last step, we fill in all of the gaps in the world variables with the world of evaluation and derive the meaning of the whole sentence, which reads: (68)a is true if and only if the proposition "Tsuisun will go on a tour in Europe next year" is true and the speaker's belief, composed of the said proposition being true and the addressee believing the same proposition, is also true; additionally, there is an implicature that the addressee has the best possible grounds about the truth of the same proposition.

6.6 Summary and a theoretical consequence

From the observations and discussion in this chapter, we see not only one more example of using a negator in a non-negating way but an evidential of mutual knowledge, which has never been identified before in Sinitic languages.

What is even more interesting is that this evidential is attitudinal and collaborates with topicalization, demonstrating the hallmark of a discourse-oriented language: TSM, in which the element in question was born and is used.

Moreover, this element is the last piece of the puzzle in the far left periphery of this dissertation, as shown below.

(69) [$_{SaP}$ [$_{Sa'}$ ***leh^{1}*** (咧) [$_{SaP}$ [$_{Sa'}$ ***leh^{2}*** (咧) [$_{dtP}$ [$_{dt'}$ ***ah*** (啊) [$_{AttP}$ ***bô$_{i}$*** (無) [$_{Att'}$ [$_{FocP}$ [$_{Foc'}$ ***sī^{CVF}*** (是) [$_{SAP}$ …[$_{FocP}$ [$_{Foc'}$ ***sī^{dictum}*** (是) [$_{PartP}$ [$_{Part'}$ ***leh^{3}*** (咧) [$_{EvalP}$ [$_{Eval'}$ **t$_{i}$** [$_{EpistP}$ [$_{Epist'}$ …

If this picture is on the right track, pinpointing the evidential *bô* (無) also helps us precisely locate the Att(itudinal) Phrase. Demarcated by the sentence-initial *ah* (啊), the AttP is distinguished from the lower layer of the SA shell, in contrast to Haegeman's (2014) speculation that the lower SaP is more "attitudinal." Now we know AttP is even lower and has its own projection.

In addition, theoretically, the variations in the evidential *bô* (無) construction (see (16)) provide evidence of an anti-symmetric structure in this language. Unless one adopts a theory of right-branching specifiers, there is no way the distribution of this element can be well accounted for.

Lastly, the citation tone found with the sentence-final occurrence of the evidential *bô* (無) signals the disparities among sentence-final particles. As the most mentioned sentence-final particles, question particles in TSM are generally tone-neutralized. Nonetheless, Simpson & Wu 2002 (also ref. Hsieh & Sybesma 2011) argued that the sandhi tone on the sentence-final *kóng* (講) is evidence of the IP-raising analysis. The different tones pronounced on different kinds of sentence-final particles may be a clue of these particles' positions and functions.

It is noteworthy that the citation tone on the sentence-final evidential *bô* (無), in contrast to sentence-final *kóng* (講), should not be taken as evidence against our movement analysis. In fact, movement does not seem to be a sufficient condition for tone sandhi on the last syllable of the left-behind tail. Take object-fronting as an example:

(70) Tsuí-sūn gû-bah tsiȧh, ti-bah m̄-tsiaȟ. (TSM)
Tsuisun beef eat pork NEG-eat
水順 牛肉 食 豬肉 毋食
“Tsuisun eats beef but not pork.”

In this sentence, both objects precede the verb on the surface, and no tone sandhi occurs on the verb. One may analyze the inversed verb-object order in (70) as induced by either the focus or a (contrastive) topic; whereas—unless one insists and can prove that all of the phenomena are irrelevant to displacement—tone sandhi seems to fall short of being a movement indicator.

I can only file this away with other puzzles that invite us to explore and explain in the future.

CHAPTER 7 CONCLUDING REMARKS

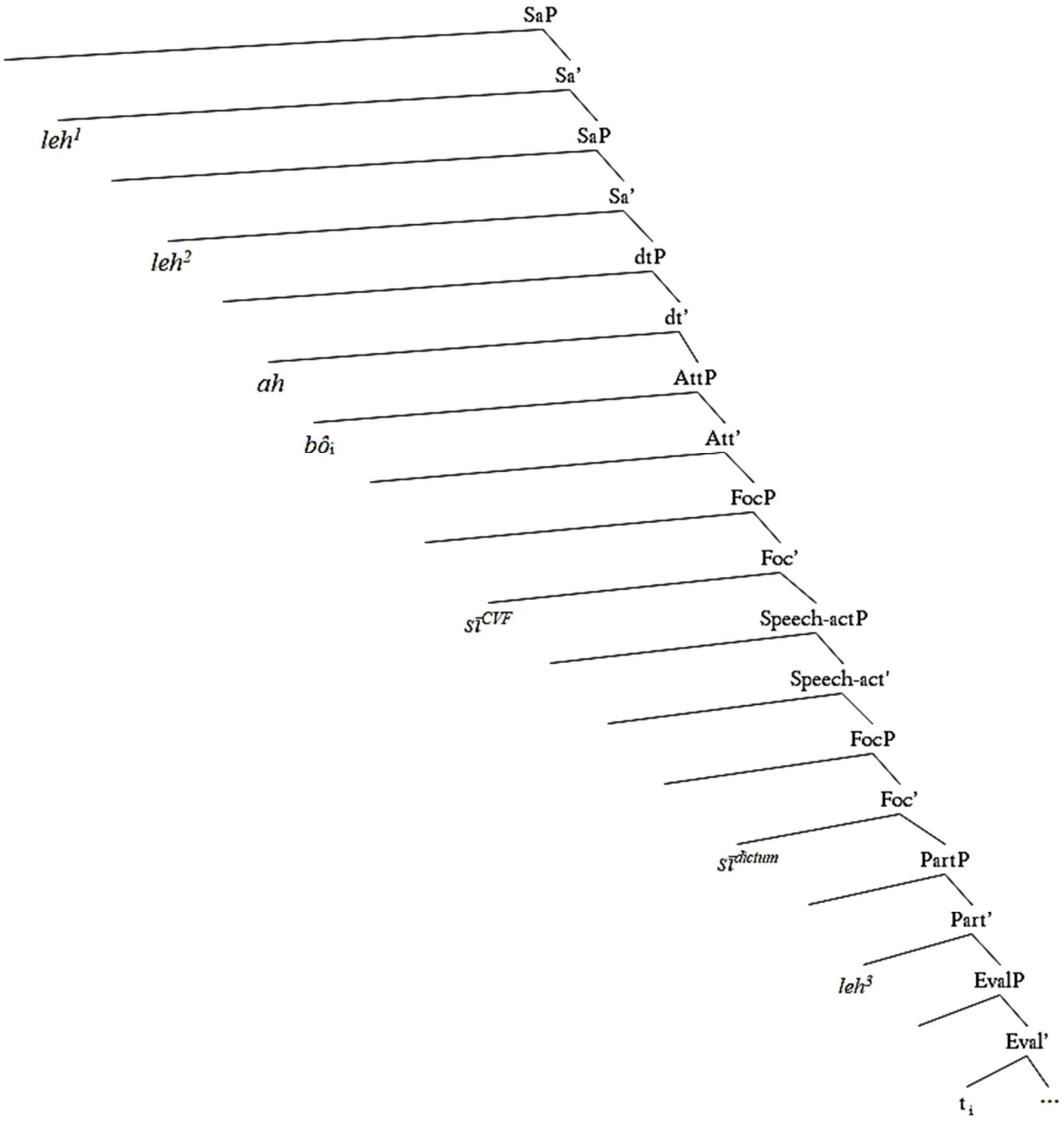
In the finale, I will summarize the findings and contributions of this dissertation and enumerate several directions for future research.

7.1 Findings and contributions

As indicated in the title, the aim of this dissertation is to investigate the far left periphery—the supposed realization of the syntax-pragmatic interface, whose structure is relatively unknown. By looking into several items in TSM that have drawn less or even no attention in the literature and seem to be discourse- or speaker-oriented, we have now a preliminary chart for the section between the SA shell, the top of the topography, and the utterance, in which almost all of the left-peripheral elements are pinpointed in previous studies.

The finalized chart is on the next page.

(1)



We may extend our knowledge of the far left periphery thanks to the overt embodiment of the SA shell in TSM and the strong pragmatic character of this language, which supposedly engendered a relatively rich array of discourse-oriented lexical items.

Since the initiation of the linguistics enterprise, function words have been well-known to be subtle and elusive. In addition to locating them on the syntactic topography, we also attempted to provide an explicit denotation for each of the investigated items. Both the syntax and semantics of these elements should be serviceable, not merely for

our understanding of human language, especially the syntax–pragmatics interface, but also for teaching and learning TSM as a second language.

Aside from revealing the lexical elements merged under the SA shell in one more language, our study on *sī* (是) "be"—the cognate and counterpart of *shì* (是) "be" in MC—expands our vision of the long-studied word. For decades, people have argued about its theoretical status and how to analyze it, but not until this study we see empirically there are still more to excavate.

Theoretically, in addition to the above, if our analysis of sentence-initial *ah* (啊) is on the right track, then we seem to have located a possible position for the null topic suggested in Huang 1984: the specifier of dtP, which is right below the SA shell. Moreover, through the inquiry into the distribution and derivation of its distribution pertinent to evidential *bô* (無)—a particle whose occurrences are found sentence-finally and across the sentence—we indirectly evidence that TSM is syntactically anti-symmetric, which is probably a hint for other Sinitic languages and languages in the Mainland Southeast Asia linguistic area.

7.2 Directions for future research

Because TSM is a strongly discourse-oriented language, the items included in this dissertation are definitely not all the elements on the far left periphery. Some other lexical items are worth investigating in the future for a better understanding of the syntax–pragmatics interface.

On the other hand, to have a comprehensive picture, it is impossible to ignore phonology. This has already been seen in our discussion on the evidential *bô* (無), especially when the tone of its sentence-final occurrence is compared with that of the sentence-final *kóng* (講). Moreover, only with the phonological perspective can we consider more of the influence of intonation and the various tones employed by sentence-final particles. In fact, this is probably one of the keys with which we may attain a more satisfactory explanation of the sentence-initial *ah* (啊) licensing.

Explicitly defining the licensing of the sentence-initial *ah* (啊) in the future will help us clarify and more adequately incorporate focus in research on syntax–pragmatics.

Last but not least, throughout this dissertation, sentence-final particles play an important role in our data and analyses, despite them not being the elements we targeted. Without sufficient knowledge of them, our exploration of items with regard to discourse and pragmatics necessarily contains much jolting and is more or less impeded. On the shoulders of previous researchers, we should push the boundaries on this aspect in the coming days.

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