

Taxonomy of questions in Taiwan

Southern Min

[臺灣閩南語中間句的分類]

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Contra the conventional four-way distinction of syntactically-formed questions in Taiwan Southern Min (TSM): (i) yes-no, (ii) A-not-A, (iii) disjunctive, and (iv) *wh*-questions (e.g., Lau 2010a), we justify a more revealing dichotomy of confirmation-seeking (CS) polar questions and information-seeking (IS) constituent questions, based on a suite of semantic and syntactic tests proposed in extensive literature for Mandarin and adapted further for TSM, where A-not-A belongs to the disjunctive type, which is in turn a subcategory of IS constituent questions. Controversies over the proper status of some sentence-final question particles and *kám* questions are also deliberated. Dismissing some alleged polar question particles as polar or A-not-A tags, we recognize *nih* and *honnh* as interrogative polar particles. We also show that *kám* has two underlying forms. One is a portmanteau word of the modal *kánn* and the negator *m̄* and thus forms a *whether-or-not* disjunctive question (Huang 1988a, 1991). However, when *kám* is short for *kámkong* ‘don’t tell me’, similar to the Mandarin *nandao*, it appears in a polar question.

Keywords: TSM, IS constituent questions, CS polar questions, question particles, *kám* questions

關鍵詞: 臺灣閩南語、徵求訊息問句、請求確認問句、疑問助詞、「敢」問句

1. Introduction

Questions are most commonly classified into three types: (a) polar questions, (b) disjunctive questions, and (c) *wh*-questions, as shown in Table 1. Terminologies

may vary, e.g., ‘polar’ is also known as ‘yes-no’, ‘disjunctive’ also known as ‘alternative’, and ‘*wh*-questions’ also known as ‘constituent questions’ or ‘variable questions’, but the three-way distinction remains the same. This is illustrated in (1) for English (e.g., Huddleston 1994: 416) and in (2) for Mandarin Chinese (e.g., Huang, Li & Li 2009: 236).

Table 1. Conventional three-way distinction of questions

Questions		
Polar Qs	Disjunctive Qs	<i>Wh</i> -Qs

- (1) a. Are you ready?
 b. Is it a boy or a girl?
 c. Whose hat is this?
- (2) a. Ni renshi ta ma?¹
 you know him PQP
 ‘Do you know him?’
 b. Ni xiang chu-qu kan dianying haishi zai jia da majiang?
 you want go-out see movie or at home play majiang
 ‘Would you like to go out to see a movie or play majiang at home?’
 c. Ni xiang gen shei shangliang zhe-jian shi?
 you want with who discuss this-CL thing
 ‘Who would you like to discuss this matter with?’

However, binary distinctions, though rare, are also found. Huddleston (1994: 418), for example, proposes a two-way semantic distinction of ‘closed interrogatives’ and ‘open interrogatives’ based on their respective closed and open set of expected answers. As summarized in Table 2, the former consist of polar and disjunctive questions, while *wh*-questions form open interrogatives. The closed set of answers with a polar question consists of *yes* and *no*, while with a disjunctive question the closed set contains the options specified in the questions.

Table 2. Huddleston’s (1994: 418) two-way distinction

Questions		
Closed Interrogatives		Open Interrogatives
Polar Qs	Disjunctive Qs	<i>Wh</i> -Qs

1. Abbreviations used in this paper are listed at the end of this article.

Tang's (1984: 383–384) dichotomy, shown in Table 3, is also based on expected answers, but from a rather different perspective as Huddleston's. Given that canonical answers to polar questions are expected to be either *yes* or *no*, polar questions stand alone as a single category; disjunctive and *wh*-questions thus form a separate category, as their answers are not allowed to be *yes* or *no*. The only difference between disjunctive and *wh*-questions is that in the former the options are explicitly listed, while in the latter the options are only delimited by the specific *wh*-element and the universe of discourse between the interlocutors.²

Table 3. Tang's (1984: 383) two-way distinction

Questions		
Yes-no Answers	Non-yes-no Answers	
Polar Qs	Disjunctive Qs	<i>Wh</i> -Qs

Among the two binary distinctions presented in Table 2 and 3, Tang's (1984) dichotomy is argued to be more reliable, in that the syntactic and semantic properties of the questions support this dichotomy. Polar questions seek confirmation on the proposition put forth, while both disjunctive and *wh*-questions seek information targeted by the specific interrogative element, i.e., a disjunctive interrogative *haishi* 'whether...or' in the former, e.g., (2b), and a *wh*-element in the latter, e.g., (2c). Thus, we contend that the terms, confirmation-seeking (CS) and information-seeking (IS), are more suitable and insightful to characterize the two-way distinction of questions. Tang's (1984) dichotomy is relabeled as shown in Table 4. This taxonomy is what we will argue for in this paper.

Table 4. Two-way distinction of questions

Questions		
Confirmation-seeking	Information-seeking	
Polar Qs	Disjunctive Qs	<i>Wh</i> -Qs

Such a dichotomy of questions can be formally captured in the recent semantic proposal by Bhatt & Dayal (2020: 1125), where CS polar questions denote *singleton* sets of propositions, e.g., (3a). An IS question, however, whether it is a

2. Note that various approaches to the taxonomy of questions, which we have just reviewed, represent different theoretical constructs, rather than actual grammatical markings in specific languages.

wh-question (3b) or a disjunctive question (3c), puts forth not one but *two or more* propositions. This is fully compatible with the standard view in semantics literature that *wh*-questions denote multi-membered sets. The same multi-membered set requirement is also true for disjunctive questions, as the expected response is one of the proffered alternatives (Bhatt & Dayal 2020: 1136).

- (3) a. Polar Qs
 $[[\text{did John leave}]] = \lambda p. [p = \hat{\text{John left}}] = \{\text{John left}\}$
 (Bhatt & Dayal 2020: 1125, (22b))
- b. *Wh*-Qs
 $[[\text{who left}]] = \lambda p. \exists x [\text{person}(x) \wedge p = \hat{x \text{ left}}] = \{\text{John left, Sue left, Kostas left, ...}\}$
 (Bhatt & Dayal 2020: 1125, (22a))
- c. Disjunctive Qs
 $[[\text{did John leave or stay}]] = \lambda p. [p = \hat{\text{John left}} \vee p = \hat{\text{John stayed}}] = \{\text{John left, John stayed}\}$

Wu & Her (2020) offer a similar semantic interpretation of this dichotomy to distinguish Mandarin *ma*-questions and *ne*-questions, in the spirit of Hamblin (1958, 1973), i.e., a CS question maps a proposition directly to a set of truth values; an IS question, however, maps a proposition first to a set of propositions, which are in turn mapped to a set of truth values. With a CS question, the interlocutor is thus expected to (dis)confirm the proposition presented, whereas with an IS question, the interlocutor is expected to select one or more propositions from the set of propositions entailed, or the set of possible answers. This dichotomy has been further justified empirically in two Sinitic languages, Mandarin and Xiang, with a set of syntactic and semantic tests, in Her, Che & Bodomo (to appear), where it is demonstrated that Xiang in fact has no CS polar questions.

In this paper we focus on the Sinitic language Taiwan Southern Min (TSM), in which questions are conventionally classified into four types (see Table 5) (e.g., Lau 2010a). We will demonstrate that, though TSM does have genuine CS polar questions, this four-way distinction misses important generalizations, which the CS and IS dichotomy can fully capture. Specifically, we will justify the inclusion of A-not-A questions under disjunctive questions, which in turn join *wh*-questions in forming IS constituent questions.

Table 5. Lau's (2010a) four-way distinction in Taiwan Southern Min

Questions			
Yes-no Qs	A-not-A Qs	Disjunctive Qs	<i>Wh</i> -Qs

To that aim, this paper is organized as follows. Section 2 reviews the syntactic and semantic tests justifying the two-way distinction of questions in Mandarin. Section 3 then adapts these tests for TSM to justify making the two-way distinction of CS polar questions and IS constituent questions, with the genuine polar question particle *nih* identified. Section 4 further investigates the proper status of a host of sentence-final interrogative particles and demonstrates that these are negative markers and question tags, apart from the polar particles *nih* and *honnh*.³ Section 5 further investigates the controversy and confusion over *kám* questions and justifies distinguishing two forms of *kám*: the contracted form of *kámkóng* and the portmanteau of the modal *kánn* and the negator *m̄* which is thus an A-not-A disjunctive by definition. Section 6 concludes the paper.

2. Criteria for a two-way distinction in Mandarin

This section briefly reviews the suite of semantic and syntactic tests that have been established in the literature for the distinction of various question types in Mandarin (e.g., Tang 1981, 1998, Hsieh 2001, Huang, Li & Li 2009, Xu 2013), including the types of answers, the question particles *ma* and *ne*, the adverbs *nandao* ‘don’t tell me’ and *daodi* ‘after all’, the availability of indirect question counterparts, and intervention effects. This suite of tests allows for clear-cut differentiation between CS and IS questions.

2.1 The two-way semantic distinction in terms of answers

Recall that a CS question seeks (dis)confirmation of the truth of a proposition from the addressee, whereas an IS question requires specific information targeted by the *wh*-element. Accordingly, the different semantics given to CS and IS questions in (3) dictate that only CS questions can be answered affirmatively to confirm, or negatively to disconfirm, the proposition in terms of its truthhood. This can be more vividly illustrated with answers to a genuine negative polar question.

- (4) a. Q: Tamen bu ai qian ma?
 they not love money PQP
 ‘Do they not love money?’

3. We distinguish *honnh* with a rising contour tone from *honnh* with a falling contour tone. In this paper, we focus on the former, with no mention of the latter. See fn. 11 for the distinction between them.

- b. A: Shide/Dui/Zhengque, (tamen bu ai qian).
 yes/right/correct they not love money
 'No, they do not love money.'
- c. A: Bu (shide)/Bu dui/Cuo, (tamen ai qian).
 no/not right/wrong they love money
 'Yes, they love money.'

Note that in (4b) whether the answer is *dui* 'right' or *zhengque* 'correct', it means the same as the affirmative *shide* 'yes' in confirming the truth of the proposition *tamen bu ai qian* 'they do not love money', while both *bu dui* 'not right' and *cuo* 'wrong' in (4c) mean the same as the negative *bu* 'no' in disconfirming the proposition.

Interestingly, the Mandarin *yes* and *no* in (4a–b) are more appropriately translated as *no* and *yes*, respectively, in English, exactly the opposite. A word of caution is thus necessary here. Readers are strongly advised *not* to construe the meaning of a genuine CS polar question in Mandarin, e.g., (4a), according to its apparent counterpart in English, which is a *putative* polar question but its genuine status is in fact controversial.

Briefly, Mandarin, like Japanese and Korean, is a truth-based language, different from polarity-based languages such as English and Swedish; in the former a *yes* or *no* answer is to convey (dis)confirmation of the proposition the speaker put forth (e.g., *tamen bu ai qian* 'they do not love money'), while in the latter a *yes* or *no* echoes the polarity of the proposition involved in the answer instead (e.g., *yes, they (do) love money* or *no, they do not love money*) (Kuno 1973, Pope 1976, Sadock & Zwicky 1985, Jones 1999, Holmberg 2016). The polarity-based answers thus resemble answers to yes-no disjunctive questions, e.g., *do they love money or do they not love money?* and *do they love money or not?*

There is indeed a long-standing, albeit minority, view that putative polar questions in English are in fact disjunctive questions (Bolinger 1978: 87). Han & Romero (2004), for example, argue explicitly for a covert *whether* in matrix yes-no questions and further demonstrate that *whether* is subject to *wh*-movement like other *wh*-elements. A thorough deliberation is clearly beyond the scope of this paper; we thus again caution the reader not to equate polar questions in Chinese languages, e.g., Mandarin and TSM, with putative polar questions in English.

Back to our argumentation for the two-way distinction, CS polar questions thus form a unique category in terms of their semantics, which is reflected in the truth-based answers they require. All other questions form a separate category in this regard.

2.2 The 'ma vs. ne' distinction

Polar questions in Mandarin require the question particle *ma* and disallow *ne*, while all other question types allow *ne*, not *ma*, as shown in (5). This divide accurately manifests the two-way distinction between CS polar and IS constituent questions.

- (5) a. Ni xihuan chi niurou ma?
 you like eat beef PQP
 'Do you like to eat beef?'
- b. Ni xihuan haishi taoyan chi niurou (ne)?
 you like or dislike eat beef CQP
 'Do you like or dislike to eat beef?'
- c. Ni xi(huan)-bu-xihuan chi niurou (ne)?
 you like-NEG-like eat beef CQP
 'Do you like to eat beef or not?'
- d. Ni weishenme xihuan chi niurou (ne)?
 you why like eat beef CQP
 'Why do you like to eat beef?'

2.3 The 'nandao vs. daodi' distinction

Similar to the *ma/ne* divide, as illustrated by (6) and (7), CS polar questions can take the adverb *nandao* 'don't tell me' but reject *daodi* 'after all'; however, it is exactly the opposite with all IS constituent questions.

- (6) a. Ni nandao xihuan chi niurou ma?
 you don't.tell.me like eat beef PQP
 'You like to eat beef? Don't tell me that you do.'
- b. *Ni daodi xihuan chi niurou ma?
 you after.all like eat beef PQP
- (7) a. Ni daodi xihuan haishi taoyan chi niurou (ne)?
 you after.all like or dislike eat beef CQP
 'Do you, after all, like or dislike to eat beef?'
- a'. *Ni nandao xihuan haishi taoyan chi niurou (ne)?
 you don't.tell.me like or dislike eat beef CQP
- b. Ni daodi xi(huan)-bu-xihuan chi niurou (ne)?
 you after.all like-NEG-like eat beef CQP
 'Do you, after all, like or dislike to eat beef?'

- b. *Ni nandao xi(huan)-bu-xihuan chi niurou (ne)?
 you don't.tell.me like-NEG-like eat beef CQP
- c. Ni daodi weishenme xihuan chi niurou (ne)?
 you after.all why like eat beef CQP
 'Why do you, after all, like to eat beef?'
- c'. *Ni nandao weishenme xihuan chi niurou (ne)?
 you don't.tell.me why like eat beef CQP

This contrast receives a nice explanation in the semantic accounts of Bhatt & Dayal (2020) and Wu & Her (2020), where CS polar questions denote a single proposition. Since *nandao* involves the speaker's disbelief of the truth of a proposition put forth, it can only be compatible with a CS polar question, not an IS constituent question. The semantics of *daodi*, on the other hand, involves the emphatic quest of the exact selection among a set of propositions; it is therefore only available to IS constituent questions.

2.4 Intervention effect

It has been observed that an in-situ *wh*-phrase cannot be separated from its operator by a quantificational or focus phrase (e.g., Beck 1996, 2006, Beck & Kim 1997, Pesetsky 2000, Kim 2002, Yang 2008, 2012, Xie 2013). Ill-formedness due to such a violation is an intervention effect, schematized in (8), showing two syntactic configurations, where an intervening quantificational or focus phrase serves as a barrier for LF movement of *wh*-in-situ or Q-operator binding of *wh*-in-situ (see Tsai 1994, 1999 and Soh 2005 for their syntactic analyses of *wh*-questions in Mandarin).

- (8) a. *[[... X_i ... [Q/FocP ... [... t_i^{LF} ...]]]
 b. *[[_{CP} Q_i [_{IP} ... Q/FocP ... wh_i ...]]

Xu (2013) demonstrates that disjunctive questions and *wh*-questions in Mandarin are both subject to an intervention effect, as shown in (9a) and (9b), respectively;⁴ yet, CS polar questions are immune, as shown in (10).

4. One point of note is that in Mandarin and TSM, the argument-adjunct asymmetry seems to exist with respect to intervention effects. Yang (2008, 2012) points out that Mandarin *wh*-arguments show insensitivity to intervention effects in some cases but not in others, as exemplified in (i) and (ii), while Mandarin *wh*-adjuncts are subject to intervention effects without exception.

- (i) Meigeren dou chi shenme?
 everyone all eat what
 'What did everyone eat?'

(Yang 2008: 7, (13a))

- (9) a. **Ta ye/zhi chi (haishi) bu chi niurou?*
 he also/only eat or not eat beef
 Intended: ‘Does he also/only eat beef or not?’
 b. **Ta ye/zhi weishenme chi niurou?*
 he also/only why eat beef
 Intended: ‘Why does he also/only eat beef?’
- (10) *Ta ye/zhi chi niurou ma?*
 he also/only eat beef PQP
 ‘Does he also/only eat beef?’

Soh (2005) proposes that intervention effects obtain in (9a) and (9b) because the focus phrases, *ye* ‘also’ and *zhi* ‘only’, block the covert feature movement of a Q-operator to C. Note that in the well-formed (11) there are no intervening focus phrases.

- (11) a. *Ta shi (haishi) bu shi ye/zhi chi niurou?*
 he COP or not COP also/only eat beef
 ‘Is it or isn’t it the case that he also/only eats beef?’
 b. *Ta weishenme ye/zhi chi niurou?*
 he why also/only eat beef
 ‘Why does he also/only eat beef?’

Unlike IS questions, CS polar questions have the question particle *ma* base-generated in C, which takes wide scope over the matrix clause and thus exhibits no intervention effects.

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- (ii) a. **Zhiyou Zhangsan chi-le shenme?*
 only Zhangsan eat-ASP what
 Intended: ‘What was x such that only Zhangsan who ate x?’ (Yang 2008: 9, (16a))
 b. **Zhangsan ye chi-le shenme?*
 Zhangsan also eat-ASP what
 ‘What did Zhangsan also eat?’ (Yang 2008: 9, (16c))

Yang (2008, 2012) argues that such variations exhibit two types of intervention effect, the weak and the strong. The former does not rule out *wh*-arguments but the latter does, and *wh*-adjuncts are sensitive to both. Yang (2008, 2012) further argues that both types of intervention effect result from the Minimality Effect and the Competition Effect respectively. See Yang (2008, 2012) for a detailed discussion on distributional variations in (in)sensitivity to intervention effects of *wh*-questions in Mandarin. Despite such variations as (i–ii) existing in Mandarin *wh*-arguments, (in)sensitivity to intervention effects is still a viable and effective test for the two-way distinction of questions. For the sake of clarity, we employ *wh*-adjuncts for illustration in the relevant examples in the paper.

2.5 The availability of the indirect question counterpart

Crucially, CS polar questions can only be matrix clauses serving as direct questions; see (12), while all disjunctive and *wh*-questions can also be embedded clauses functioning as indirect questions; see (13).

- (12) a. Wo wen A-mei, 'ni chi niurou ma?'
 I ask A-mei you eat beef PQP
 'I asked A-mei, "Do you eat beef?"'
 b. *Wo wen A-mei, ta_i chi niurou ma?
 I ask A-mei she eat beef PQP
 Intended: 'I asked A-mei whether she eats beef.'
- (13) a. Wo wen A-mei_i ta_i chi (haishi) bu chi niurou.
 I ask A-mei she eat or not eat beef
 'I asked A-mei whether she eats beef or not.'
 b. Wo wen A-mei_i ta_i weishenme chi niurou.
 I ask A-mei she why eat beef
 'I asked A-mei why she eats beef.'

The semantic accounts by Bhatt & Dayal (2020) and Wu & Her (2020) again reveal an insight into this contrast. Given that clausal complements of verbs such as *wen* 'ask' and *zhidao* 'know' must be propositions, an IS question, which denotes a set of propositions, can naturally serve as the complement. In contrast, its semantics being a set of truth values of a proposition, a CS polar question cannot serve as a complement and is thus not an indirect question.

2.6 An interim summary

The five semantic and syntactic tests assembled from the extensive literature on questions and their realization in Mandarin are summarized in Table 6.

Table 6. Distinction of CS and IS questions in Mandarin

	Truth-based yes-no answers	Particle <i>ma</i>	Particle <i>ne</i>	Adverb <i>nandao</i>	Adverb <i>daodi</i>	Intervention effects	Indirect question
CS Polar Qs	✓	✓	✗	✓	✗	✗	✗
IS Constituent Qs	✗	✗	✓	✗	✓	✓	✓

3. Taxonomy of questions in TSM

Now turning to TSM, we will first discuss the conventional classifications of questions and outline the taxonomy we propose. In Section 3.2, we justify the category of CS polar questions in TSM, and in Section 3.3 we demonstrate that disjunctive questions and *wh*-questions form a larger category of IS constituent questions. An interim summary is given in Section 3.4.

3.1 Previous four-way classification

TSM questions are most commonly classified into four types, either explicitly or implicitly. Lau's (2010a) four-way classification, for example, contains these four types: yes-no, A-not-A, disjunctive, and *wh*-questions, but based on rather superficial features:

If we intend to adopt the categorization of questions in the literature, it is favorable to distinguish them according to the key hallmark of each type. Thus, *wh*-questions are questions with question words as counterparts of English *wh*-words; A-not-A questions are questions with A-not-AB or AB-not-A sequence without a disjunctive conjunction; disjunctive questions are questions with more than one disjunctive part conjoined by disjunctive conjunction(s); and yes-no questions are those answered with polar replies (e.g., *yes* versus *no*).

(Lau 2010a: 100)

Putative yes-no questions are illustrated in (14);⁵ (15) demonstrates the A-not-A type; examples of disjunctive questions and *wh*-questions are given in (16) and (17), respectively (e.g., Cheng 1997, Tang 1998, Hsieh 2001, and Lau 2010b).

- (14) a. Lí sī Tâi-uân lâng sī--bô?
 you COP Taiwan person PQP
 'Are you a Taiwanese?'
 b. I beh lâi sioh?
 he want come PQP
 'Is he coming?'
 c. I beh lâi sī--m̄(sim)?
 he want come PQP
 'Is he coming?'

5. We show in Section 4 that the first three sentence-final interrogative particles are actually question tags, of which *sioh* is assumed to be a portmanteau word which combines the copula *sī* and the particle *--ooh*. See Sections 4.2 and 4.3 for a detailed discussion.

- d. I beh lâi nih?⁶
 he want come PQP
 ‘Is he coming?’
- (15) a. I sī-m̄-sī beh lâi?
 he COP-NEG-COP want come
 ‘Is it the case that he is coming?’
- b. I ē lâi buē/bē?
 he will come will.not
 ‘Will he come or not?’
- c. Lí beh khì bô?
 you want go NEG
 ‘Do you want to go or not?’
- d. Lí beh lâi m̄?⁷
 you want come NEG
 ‘Do you want to come or not?’
- (16) Lí beh tsiáh gû-bah iáh-sī (tsiáh) ti-bah?⁸
 you want eat beef or eat pork
 ‘Do you want to eat beef or (eat) pork?’

6. According to Uijin Ang (*p.c.*), the particle *nih*, used mainly in Tainan, may have come from the phonological fusion of the A-not-A constituent *sī-m̄-sī*.

7. In this paper, the notation *m̄* is used exclusively to denote the negative particle. See fn. 13 for another *m̄* with a mid-level prolonged tone, marked as *mm*.

8. A sentence where two (or more) constituents are conjoined by the conjunction *iáh-sī* ‘or’, also pronounced as *áh-sī*, is a typical disjunctive question in TSM. It has been argued in the literature (e.g., Huang, Li & Li 2009) that the Mandarin equivalent *haishi* should be distinguished from *huoshi* (or *huozhe*) since the former is used in disjunctive questions and the latter in declaratives; in other words, *haishi* is the interrogative counterpart of *huoshi* (or *huozhe*), being rendered as ‘(whether)...or’. However, it seems that such a distinction does not exist in TSM. The following examples show that *iáh-sī* can have the non-interrogative use, meaning ‘(either)...or’, as in (i), though it is the key element forming disjunctive questions in TSM, as in (ii).

- (i) a. Q: Lí kám ū su-iàu ka-pi iáh-sī tē?
 you KAM have need coffee or tea
 ‘Do you need [either coffee or tea]?’
- a. A: M̄-bián, to-siā.
 need.not thank
 ‘No need; thank you.’

- (17) a. Lí sī-án-tsuánn beh tsiáh gû-bah?
 you why want eat beef
 ‘Why do you want to eat beef?’
 b. Lí teh siünn siánn-mih?
 you PROG think what
 ‘What are you thinking?’

It is true that each of the four types can be justified on the ground of its unique features, but such a scheme seriously overlooks cross-category generalizations and thus the fact that some of them share meaningful common features and form a larger category. The taxonomy we will argue for is shown in Table 7. Specifically, A-not-A questions, which do not have an overt disjunctive conjunction, are considered a subtype of disjunctive questions, which in turn form a subtype of IS constituent questions, with *wh*-questions as its sister category.

Table 7. Proposed taxonomy of TSM questions

Questions			
Confirmation-seeking	Information-seeking		
Polar Qs	Constituent Qs		
	<i>Disjunctive Qs</i>	<i>Wh-Qs</i>	
	A-not-A	Overt Alternative	

CS polar questions thus stand alone. However, given the lesson from Xiang, which has been demonstrated to have A-not-A, but no polar questions (Her, Che

- (ii) a. Q: Lí beh lim ka-pi iáh-sī tê?
 you want drink coffee or tea
 ‘Do you want to drink [coffee] or [tea]?’
 b. A: Ka-pi; to-siā.
 coffee thank
 ‘Coffee, please; thank you.’

In (ia), where the interrogative particle *kám* is involved (see Section 5 for our differentiation of two forms of *kám* and the discussion about the interrogative *kám*), the two constituents conjoined by *iáh-sī* are treated as a single item, and *iáh-sī* denotes non-interrogative alternatives, similar to *huoshi* in Mandarin. On the other hand, *iáh-sī* is responsible for (iia) as a disjunctive question with two alternatives, [drink coffee] and [drink tea], presented, just like *haiishi* in Mandarin. There remain some puzzles about the issue of the disjunctive conjunction in TSM. A detailed discussion on this issue is beyond the scope of this paper; thus, we leave it for future study.

& Bodomo to appear), we will proceed with caution and first justify the existence of genuine CS polar questions in TSM.

3.2 IS questions vs. CS questions in TSM

To justify the category of CS polar questions in TSM, the same suite of semantic and syntactic tests mentioned in Section 2 will be adapted. TSM has a rich collection of interrogative sentence-final particles, but not all the questions formed by them are CS polar questions. Here we first examine the particle *nih*, as in (14d), and demonstrate that it is a genuine polar question particle, like the Mandarin *ma*.

The first test is how the question is answered. Recall that a CS polar question maps a proposition to a set of truth values but an IS constituent question first maps a proposition to a set of propositions and then to a set of truth values; thus, only the former can be answered affirmatively to confirm, or negatively to disconfirm, the proposition's truth. In other words, only CS polar questions require truth-based yes-no answers. The response to an IS constituent question, if it can be answered with a *yes* or *no* particle, must be polarity-based, i.e., based on the choices of polarities explicitly provided by the question. This semantic property of CS polar questions is illustrated by (18).

- (18) a. Q: I buaih lâi nih?
 he not.want come PQP
 'Is he not coming?'
 b. A: Sī--ah/Heh--ah/Tiòh--lah, (i buaih lâi).
 yes--PRT/yes--PRT/right--PRT he not-want come
 'No, he is not coming.'
 c. A: M̄-sī/Bó--ah/M̄-tiòh--ooh, (i beh lâi).
 no/no--PRT/not-right--PRT he want come
 'Yes, he is coming.'

(18a) is a negative polar question ending with *nih*. As can be seen from the responses in (18b) and (18c), the addressee either confirms the truth of the proposition *i buaih lâi* 'he is not coming' with *yes* (or *right*) or disconfirms the proposition with *no* (or *wrong*). This should not be confused with polarity-based yes-no answers, which just echo the polarity of the proposition involved in the response, as revealed in the English translations of (18). Example (18) indicates that *nih* is the same as the Mandarin *ma* particle in this regard, and thus a question ending with *nih* is a genuine CS polar question.

Next, we use the interrogative adverbs *kámkóng* 'don't tell me' and *tàuté* 'after all' to test *nih* questions. These two adverbs, just like their counterparts in Mandarin, *nandao* 'don't tell me' and *daodi* 'after all', serve to distinguish CS

polar from IS constituent questions (Hsieh 2001, 2014, Lau 2010b, among others). However, it should be noted that because of its resemblance to *nandao*, the adverb *kámkóng* is considered as a full form of *kám* in *kám* questions in some studies (e.g., Tang 1998, 1999). This confusion between *kámkóng* and *kám* may cause misinterpretation of some crucial data, which in turn results in a mistaken classification of some questions. We argue that it is necessary to distinguish two forms of *kám*, one of which is the contracted form of *kámkóng* and the other a purely interrogative particle. The differentiation of these two forms of *kám* will be discussed in detail in Section 5. With this confusion set aside, the distinctive behavior between *kámkóng* and *tàuté* is a reliable test for the two-way taxonomy.

As reviewed in the previous section, in Mandarin, CS polar questions can take the adverb *nandao* but reject *daodi* while IS constituent questions behave oppositely. We can get the same result from *kámkóng* and *tàuté*. In (19), a question ending with *nih* is only compatible with *kámkóng*; when replaced by *tàuté*, as in (19b), the question is ill-formed. This indicates that *nih* is a polar question particle.

- (19) a. Lí kámkóng beh tsiáh gû-bah nih?
 you don't.tell.me want eat beef PQP
 'You want to eat beef? Don't tell me that you do.'
 b. *Lí tàuté beh tsiáh gû-bah nih?
 you after.all want eat beef PQP

Further evidence comes from two other tests, the (in)sensitivity to intervention effects and the (in)availability of indirect question counterparts. In the former test, IS constituent questions, but not CS polar questions, are subject to intervention effects. As illustrated in (20), *nih* questions are immune to intervention effects, in that *nih*, like *ma*, is base-generated in C, taking wide scope over the matrix clause. No LF movement or binding of Q-operator is involved in *nih* questions, and therefore, when focus phrases like *kan-na* 'only' are present, no intervention effects result.

- (20) Lí kan-na beh tsiáh gû-bah nih?
 you only want eat beef PQP
 'Do you only want to eat beef?'

With respect to the test with indirect questions, while IS constituent questions can serve as both direct and indirect questions, CS polar questions can only be direct questions. This is due to the above-mentioned semantic and syntactic properties of these two types of questions. A *nih* question thus cannot serve as an embedded indirect question required by verbs like *m̄ng* 'ask'; rather, it can only be used as a direct question, as seen in (21a–b).

- (21) a. Guá m̄ng a-pah 'lí beh tsiáh gû-bah nih?
 I ask dad you want eat beef PQP
 'I asked Dad, "Do you want to eat beef?"'
- b. *Guá m̄ng a-pah_k i_k beh tsiáh gû-bah nih.
 I ask dad he want eat beef PQP
 Intended: 'I asked Dad whether he wants to eat beef.'

Based on the results of the four tests, we conclude that *nih* is a genuine polar question particle; the existence of CS polar questions is thus justified in TSM. The proper status of the other interrogative sentence-final particles will be discussed in Section 4. One important thing to note about *nih* is that it is mainly used in the Tainan dialect of TSM. It is thus quite possible that TSM speakers of other dialects do not use *nih*; in this case, in their TSM all questions are IS constituent questions if no other polar question particles are attested.

3.3 Disjunctive questions and *wh*-questions as IS questions

Now let's turn to disjunctive questions and *wh*-questions in TSM. By applying the same set of tests, we will show that, in spite of their superficial differences, the two types of questions share meaningful common features and form a larger category of IS constituent questions. The properties they share are presented in turn with respect to each test.

First, disjunctive questions and *wh*-questions both denote a set of propositions, and the only minor distinction may be that the set of propositions the former denotes is limited to two or a few overt alternatives while the set of propositions the latter denotes is relatively open but still contextually constrained. With either a disjunctive question or a *wh*-question, the interlocutor is expected to select one or more propositions from the set of propositions entailed, and thus, neither require truth-based yes-no answers but are answered by identifying a particular proposition instead. This is shown in (22) and (23).

- (22) a. Q: Lí m̄ tsiáh gû-bah iáh-sī ti-bah?
 you NEG eat beef or pork
 'Do you not eat beef or pork?'
- b. A: (Guá m̄ tsiáh) gû-bah.
 I NEG eat beef
 'I don't eat beef. / Beef.'
- c. A: *Sī--ah/Heh--ah/Tiòh--lah.
 yes--PRT/yes--PRT/right--PRT
- d. A: *M̄-sī/Bô--ah/M̄-tiòh--ooh.
 no/no--PRT/not-right--PRT

- (23) a. Q: Lí m̄ tsiáh siánn-mih?
 you NEG eat what
 'What do you not eat?'
 b. A: (Guá m̄ tsiáh) gû-bah.
 I NEG eat beef
 'I don't eat beef. / Beef.'
 c. A: *Sī--ah/Heh--ah/Tiòh--lah.
 yes--PRT/yes--PRT/right--PRT
 d. A: *M̄-sī/Bô--ah/M̄-tiòh--ooh.
 no/no--PRT/not-right--PRT

Second, no interrogative particles are associated with disjunctive and *wh*-questions. The fact that ungrammaticality results from the presence of *nih* in disjunctive questions and *wh*-questions, as in (24) and (25), supports the classification of both types of questions as a larger category of IS constituent questions.

- (24) *Lí beh tsiáh gû-bah iáh-sī (tsiáh) ti-bah nih?
 you want eat beef or eat pork PQP
 'Do you want to eat beef or (eat) pork?'
 (25) a. *Lí sī-án-tsuánn beh tsiáh gû-bah nih?
 you why want eat beef PQP
 'Why do you want to eat beef?'
 b. *Lí teh siünn siánn-mih nih?
 you PROG think what PQP
 'What are you thinking?'

Furthermore, both disjunctive questions and *wh*-questions are compatible with *tàuté*, but not *kámkóng*, as in (26) and (27). An IS question denotes a set of propositions and is thus compatible with *tàuté*, which emphasizes the speaker's intention to seek a particular proposition among a set of propositions, but not *kámkóng*, which is used in questions where the speaker seeks confirmation of the truth of a given proposition.

- (26) a. Lí tàuté beh tsiáh gû-bah iáh-sī (tsiáh) ti-bah?
 you after.all want eat beef or eat pork
 'After all, do you want to eat beef or pork?'
 b. *Lí kámkóng beh tsiáh gû-bah iáh-sī (tsiáh) ti-bah?
 you don't.tell.me want eat beef or eat pork

- (27) a. Lí *tàuté* *sī-án-tsuánn* beh tsiáh *gû-bah*?
 you after.all why want eat beef
 'After all, why do you want to eat beef?'
 a. *Lí *kámkóng* *sī-án-tsuánn* beh tsiáh *gû-bah*?
 you don't.tell.me why want eat beef
 b. Lí *tàuté* *teh* *siünn siánn-mih*?
 you after.all PROG think what
 'After all, what are you thinking of?'
 b. *Lí *kámkóng* *teh* *siünn siánn-mih*?
 you don't.tell.me PROG think what

Next, both disjunctive questions and *wh*-questions show sensitivity to intervention effects. The contrasts in (28) and (29) indicate that both involve a similar configuration, where ungrammaticality results when an intervening focus phrase, e.g., *kan-na* 'only', blocks LF movement or Q-operator binding of an in-situ *wh*-phrase.⁹ Otherwise, the interrogative sentences are grammatical with a focus phrase.

- (28) a. *Lí *kan-na* beh tsiáh *gû-bah iáh-sī* (tsiáh) *ti-bah*?
 you only want eat beef or eat pork
 Intended: 'Do you only want to eat beef or pork?'
 b. Lí *sī-m̄-sī* *kan-na* beh tsiáh *gû-bah*?
 you COP-NEG-COP only want eat beef
 'Is or isn't it the case that you only want to eat beef?'

9. Given that the copular verb *sī*, the TSM counterpart of Mandarin *shi*, can be used as a focus marker (Lau 2010a), one may wonder why it does not give rise to intervention effects, as shown in (i), contrasting with (28a) and (29a).

- (i) Lí *sī* beh tsiáh *gû-bah iáh-sī* (tsiáh) *ti-bah*?
 you FM want eat beef or eat pork
 'Do you, after all, want to eat beef or pork?'

The reason behind this contrast is that the focus marker *sī* is located as high as the interrogative adverb *tàuté* 'after all', or it can be said to be an associate of the adverb, as in (ii).

- (ii) Lí *tàuté* *sī* beh tsiáh *gû-bah iáh-sī* (tsiáh) *ti-bah*?
 you after.all FM want eat beef or eat pork
 'Do you, after all, want to eat beef or pork?'

It is usually assumed in the relevant research that the left periphery of IP is the lower bound of the position of *tàuté* and its Mandarin counterpart *daodi* (e.g., Huang & Ochi 2004, Chou 2005, Lau 2010b). Thus, as an associate of an interrogative adverb, the focus marker *sī* is high enough to avoid being an intervener.

- (29) a. *Lí kan-na sī-án-tsuánn beh tsiáh gû-bah?
 you only why want eat beef
 Intended: 'Why do you only want to eat beef?'
 b. Lí sī-án-tsuánn kan-na beh tsiáh gû-bah?
 you why only want eat beef
 'Why do you only want to eat beef?'

Finally, (30) and (31) illustrate that both question types can function as a clausal complement of the matrix verb *m̄ng* 'ask', thus an indirect question. The availability of the indirect question counterpart to the two question types shows that they are both IS questions.

- (30) Guá m̄ng a-pah_k i_k beh tsiáh gû-bah iáh-sī (tsiáh) ti-bah.
 I ask dad he want eat beef or eat pork
 'I asked Dad whether he wants to eat beef or pork.'
 (31) a. Guá m̄ng a-pah_k i_k sī-án-tsuánn ài tsiáh gû-bah.
 I ask dad he why like eat beef
 'I asked Dad why he likes to eat beef.'
 b. Guá m̄ng a-pah_k i_k teh siūnn siánn-mih.
 I ask dad he PROG think what
 'I asked Dad what he is thinking of.'

Based on the results of the four tests above, we conclude that disjunctive questions and *wh*-questions form a larger category of IS constituent questions.

3.4 An interim summary

We have justified the two-way taxonomy of questions in TSM, where CS polar questions stand alone, whereas disjunctive questions and *wh*-questions form a larger category of IS constituent questions. This taxonomy and the semantic and syntactic tests used are summarized in Table 8.

Table 8. Distinction of CS and IS questions in TSM

	Truth- based yes-no answers	Polar particle <i>nih</i>	No particle	Adverb <i>kámkóng</i>	Adverb <i>tàuté</i>	Intervention effects	Indirect question
CS Polar Qs	✓	✓	✗	✓	✗	✗	✗
IS Constituent Qs	✗	✗	✓	✗	✓	✓	✓

However, two controversial issues still remain. In Section 4, we will first discuss the proper status of the other interrogative sentence-final particles, and then examine *kám* questions in Section 5.

4. Questions with interrogative sentence-final particles

The list of sentence-final interrogative particles in (32) is adopted from Lau (2010b).¹⁰ *Nih* is a genuine polar question particle, but the proper status of the others needs justification. We shall demonstrate that only *honnh* behaves like a polar question particle.¹¹ The other particles form either VP-not questions or questions tags.

10. We will dismiss *ma* from the following discussion since it is a direct borrowing from the Mandarin question particle *ma*. Additionally, the particle *m-me* (*me*) won't be discussed here either. Readers are referred to Lau (2010b) for more discussions.

11. Note that there are two *honnh*'s in TSM, one with a rising contour tone and the other with a falling contour tone. The two *honnh*'s have different functions. *Honnh* with a rising contour tone (*honnh* ↑) denotes an interrogative sense, and is used to ask for confirmation of the proposition put forth; thus, sentences with *honnh* ↑ are CS polar questions. On the other hand, *honnh* with a falling contour tone (*honnh* ↓) is used to indicate the accommodation (or receipt) of a prejacent proposition in the speaker's information state. Sentences with *honnh* ↓ should not be regarded as real CS polar questions as they have little interrogative meaning. *Honnh* ↑, as a genuine CS polar question particle like *nih*, cannot stand alone (see Section 4.2 for details), while *honnh* ↓ can, like tags. The contrast between them is manifested as in (i).

- (i) a. A: I tán--leh beh lâi.
 he later want come
 'He will come later.'
- b. B: **Honnh* ↑?
 PQP
- c. B': *Honnh* ↓.
 PRT
 '(I) got it.'

Readers should not confuse *honnh* ↑ with *honnh* ↓. In Section 4.2, only *honnh* ↑ is discussed. Further investigation of the two *honnh*'s will be left for future research.

- (32) *Buē/bē*,¹² *bô*, *m̄*, *nih*, *honnh*, *ma*, *mm*,¹³ *sī--bô*, *sī--m̄* (*sìm*), *sioh*, *hiò*, and *m̄-me* (*me*)

VP-not questions are in fact VP-not-VP disjunctive questions that involve the deletion of the second VP (e.g., Hsieh 2001, R.-H. Huang 2008). Such sentence-final negative markers are often confused with polar question particles. The fact that polar question particles are often historically grammaticalized sentence-final negative markers (e.g., Wei 2007) certainly further muddles the picture. Some particles are actually question tags but are mistakenly considered polar question particles, e.g., in Tang (1998, 1999). While all three identities: negative marker, polar question particle, and question tag, are diachronically related due to grammaticalization, synchronically they must be properly distinguished, as they behave differently, either semantically or syntactically.

In Section 4.1, we first single out negative markers from (32) and apply the suite of tests presented earlier. We will demonstrate that questions with these negative markers are VP-not questions (a.k.a. unmarked A-not-A questions) and have

12. According to *Jiaoyu Bu Taiwan Minnanyu Changyong Ci Cidian* [A Taiwan Southern Min Dictionary of Common Words by the Ministry of Education, R.O.C.], *buē* and *bē* represent two different pronunciations of the negative modal meaning ‘cannot’ or ‘will not’, or two variants of the aspectual negation meaning ‘not yet’. The existence of the two variants implies dialectal divergence. Both variants exist in either the Zhangzhou (ZZ) or Quanzhou (QZ) dialects, but they are used in opposite ways. In the QZ dialect, *buē* is used as the negative modal, and *bē* as the aspectual negation, whereas in the ZZ dialect, *buē* refers to ‘not yet’, and *bē* refers to ‘cannot’ or ‘will not’. In both dialects, either of these two can be used as an interrogative sentence-final particle, as in (i) and (ii).

- (i) Lí tsiáh pá buē?
 you eat full not.yet
 ‘Have you had your meal yet?’ (ZZ dialect)

- (ii) Lí ē lái bē?
 you will come will.not
 ‘Will you come or not?’ (ZZ dialect)

In the discussion on interrogative sentence-final particles, we will just take either use (the negative modal use) for illustration.

13. It is stated in Hsieh (2001) that there are two *m̄*'s in TSM. One with a neutralized tone is recognized as a real negative particle, and the other with a mid-level prolonged tone is considered to be a question tag in Hsieh (2001) but as a polar question particle in Lau (2010b). To avoid confusion, here we follow Hsieh's (2001) notation. *Mm* is used for the prolonged one, and *m̄* denotes the negative particle. In addition, Lau (2010b) mentions in his fn. 26 that there may be a non-interrogative version of *mm* receiving a tag construal; therefore, for the sake of clarity, *mm* will be excluded beyond the discussion. See Lau (2010b) for the relevant data and discussion of it. We only present examples with the negative particle *m̄* in this paper.

the same behavior as disjunctive questions and *wh*-questions. In Section 4.2, we show that the other sentence-final suspects all behave oppositely with respect to the tests. Thus, additional tests are applied to identify *honnh* as a true polar question particle and the others as question tags. An interim summary is given in Section 4.3.

4.1 A-not-A questions

A-not-A questions are a type of disjunctive question where two alternatives, positive and negative, are juxtaposed, giving the V(P)-not-V(P) pattern. Huang (1988a, 1991) mentions that this pattern, illustrated in (33a), gives rise to two possible forms, V-not-VP and VP-not-V, in (33b) and (33c) respectively.

- (33) a. Lí kánn tsiáh gû-bah m̄ kánn tsiáh gû-bah?
 you dare eat beef NEG dare eat beef
 ‘Dare you eat beef or dare you not?’
 b. Lí kánn (tsiáh) m̄ kánn tsiáh gû-bah?
 you dare eat NEG dare eat beef
 c. Lí kánn tsiáh gû-bah m̄ kánn (tsiáh)?
 you dare eat beef NEG dare eat

However, V-not-VP and VP-not-V are in fact less common in TSM (Zhu 1991, Tang 1998, Wang & Lien 2001, Hsieh 2014). Tang (1998) observes that the VP-not-V form is rarely used and only a few verbs, including *sī* ‘be’, *kánn* ‘dare’, *bat* ‘know; ever’, *tsai(-iánn)* ‘know’, *hó* ‘good’, *tióh* ‘right’, *thang* ‘can’, and *kiann* ‘afraid’, can form V-not-VP questions. Because of their limited use, the two forms are regarded as ‘marked A-not-A questions’ in TSM. On the other hand, the much more widely-used VP-not questions, where a negative particle occurs in the sentence-final position, as illustrated in (34), are derived from the VP-not-VP pattern via the deletion of the second VP (e.g., Hsieh 2001, R.-H. Huang 2008). Tang (1998) refers to such questions as ‘unmarked A-not-A questions.’

- (34) a. I ē lâi buē (QZ)/bē (ZZ)?
 he will come will.not
 ‘Will he come or not?’
 b. Lí ū khi-kuè Bí-kok bô?
 you have go-EXP U.S. NEG
 ‘Have you been to the U.S. yet?’
 c. Lí sī Tâi-uân lâng m̄?
 you COP Taiwan person NEG
 ‘Are you a Taiwanese or not?’

Example (35) shows that the putative particles in VP-not questions still have their meaning, marking the presence of the negative alternatives in the questions. Thus, ungrammaticality results when another negator is involved in the sentences, as illustrated in (35). Such putative particles are thus full-fledged negative markers.¹⁴

- (35) a. *I buē (QZ)/bē (ZZ) lâi buē (QZ)/bē (ZZ)?
 he will.not come will.not
 ‘Will he not come?’
- b. *Lí bô khì-kuê Bí-kok bô?
 you NEG go-EXP U.S. NEG
 ‘Have you not been to the U.S. yet?’
- c. *Lí m̄ sī Tâi-uân lâng m̄?
 you NEG COP Taiwan person NEG
 ‘Are you not a Taiwanese?’

On the other hand, as shown in (36), it is perfectly okay to use the other particles in negative sentences.

- (36) a. I m̄ lâi nih?
 he NEG come PQP
 ‘Does he not come?’
- b. I m̄ lâi honnh?
 he NEG come PQP
 ‘Does he not come?’
- c. Lí m̄ sī Tâi-uân lâng sī--bô?
 you NEG COP Taiwan person PQP(tag)
 ‘You are not a Taiwanese, aren’t you?’
- d. Lí m̄ sī Tâi-uân lâng sī--m̄(sim)?
 you NEG COP Taiwan person PQP(tag)
 ‘You are not a Taiwanese, aren’t you?’
- e. Lí m̄ sī Tâi-uân lâng sioh?
 you NEG COP Taiwan person PQP(tag)
 ‘You are not a Taiwanese, aren’t you?’

14. Researchers have noticed that tones are closely relevant to syntax (e.g., Chen 1987, Lin 1994). Among the sentence-final negative markers, some are tone-neutralized (e.g., *bô*) and some are not (e.g., *buē/bē*). One may wonder if this reveals that they are syntactically different. Tone-neutralizedness is assumed to indicate the extent of grammaticalization of the sentence-final negative markers. The different behaviors of these negative markers with respect to tone-neutralizedness mean that some are more grammaticalized than the others. However, the syntactic properties of the negative markers presented in this section show that all of them are not yet fully grammaticalized even though some are tone-neutralized.

- f. Lí m̄ sī Tâi-uân lâng hiòo?
 you NEG COP Taiwan person PQP(tag)
 'You are not a Taiwanese, aren't you?'

Based on the contrast between (35) and (36), we identify *buē/bē*, *bô*, and *m̄* as negative markers, not interrogative particles. Note that they obey the agreement with the predicates to a certain extent, while no agreement is observed between the other particles and the predicates. In other words, since the negative markers have their origin in VP-not-VP questions, they echo the aspectuality or modality of the positive alternatives remaining in the questions. This is clearly illustrated in (34a) and (34b). It has been claimed that the negative markers, *buē/bē* in (34a) and *bô* in (34b), are derivatives from the fusion of the primitive negative marker *m̄* and a modal verb, i.e., *m̄+ē* in (34a), and *m̄+ū* in (34b) (Teng 1992, Tang 1994, Lin 2004, among others).¹⁵ The make-up of the negative markers reveals their agreement in aspectuality or modality with the predicates. This piece of evidence further supports their status as negative markers.

Next, we will demonstrate that A-not-A questions are a subtype of disjunctive questions, which are IS constituent questions. A-not-A questions thus behave differently from CS polar questions. We will use VP-not questions as an example because they are the most common A-not-A questions in TSM.

The first set of Examples, (37)–(39), illustrates that A-not-A questions do not take truth-based answers. The appropriate response to these kinds of questions is by using the main predicates directly, as in (37b), (38b), and (39b). Note that the responses in (39b) should not be confused with the truth-based yes-no answers; they are formed by the main predicate of the question in (39a), the copula *sī* 'be'. The semantics of A-not-A questions is then reflected in their answering patterns. The interlocutor answers by selecting one from the set of alternatives presented which usually contains two propositions, positive and negative. Therefore, A-not-A questions are IS constituent questions semantically.

- (37) a. Q: I ē lái buē (QZ)/bē (ZZ)?
 he will come will.not
 'Will he come or not?'
 b. A: Ê / Buē (QZ)/Bē (ZZ).
 will / won't
 '(He) will. / (He) won't.'

15. For a detailed discussion on the negative marker *m̄*, readers are referred to the references listed here. In addition, Tsao (1998) analyzes *ū* 'have' in TSM as a modal verb, and argues that it can be interpreted as an aspect marker (denoting the perfective and the habitual aspect, for example) when it interacts with certain situation types; see Tsao (1998) for further details.

- c. A: *Heh--ah/Tiòh--lah/Bô--ah/M̄-tiòh--ooh.
yes--PRT/right--PRT/no--PRT/not-right--PRT
- (38) a. Q: Lí ū khi-kuè Bí-kok bô?
you have go-EXP U.S. NEG
'Have you been to the U.S. yet?'
- b. A: Ū(--ah)/Bô.
have--PRT/haven't
'(I) have. / (I) haven't.'
- c. A: *Heh--ah/Tiòh--lah/Bô--ah/M̄-tiòh--ooh.
yes--PRT/right--PRT/no--PRT/not-right--PRT
- (39) a. Q: Lí sī Tâi-uân lâng m̄?
you COP Taiwan person NEG
'Are you a Taiwanese or not?'
- b. A: Sī/M̄-sī.
COP/NEG-COP
'(I) am. / (I) am not.'
- c. A: *Heh--ah/Tiòh--lah/Bô--ah/M̄-tiòh--ooh.
yes--PRT/right--PRT/no--PRT/not-right--PRT

Next, as shown in (40)–(42), A-not-A questions are compatible with *tàuté*, but not *kámkóng*, which is evidence for A-not-A questions as IS constituent questions.

- (40) a. I tàuté ē lâi buē (QZ)/bē (ZZ)?
he after.all will come will.not
'After all, will he come or not?'
- b. *I kámkóng ē lâi buē (QZ)/bē (ZZ)?
he don't.tell.me will come will.not
- (41) a. Lí tàuté ū khi-kuè Bí-kok bô?
you after.all have go-EXP U.S. NEG
'After all, have you been to the U.S. yet?'
- b. *Lí kámkóng ū khi-kuè Bí-kok bô?
you don't.tell.me have go-EXP U.S. NEG
- (42) a. Lí tàuté sī Tâi-uân lâng m̄?
you after.all COP Taiwan person NEG
'After all, are you a Taiwanese or not?'
- b. *Lí kámkóng sī Tâi-uân lâng m̄?
you don't.tell.me COP Taiwan person NEG

The trait of being IS constituent questions is further revealed in (43)–(45), where A-not-A questions are subject to intervention effects which arise because the focus

phrase *kan-na* ‘only’ gets in the way of LF movement of [+A-not-A] to CP (cf. R.-H. Huang 2008).

- (43) *I *kan-na ē* *tsiah gû-bah buē* (QZ)/*bē* (ZZ)?
 he only can eat beef cannot
 Intended: ‘Can he only eat beef?’
- (44) *I *kan-na ū* *tsiah gû-bah bô*?
 he only have eat beef NEG
 Intended: ‘Does he only eat beef?’
- (45) *Lí *kan-na sī* *Tâi-uân lâng m̄*?
 you only COP Taiwan person NEG
 Intended: ‘Are you only a Taiwanese?’

The final set of data, (46)–(48), shows that VP-not questions behave like IS constituent questions as indirect questions.

- (46) *Guá m̄ng a-pah_k i_k ē* *tsiah gû-bah buē* (QZ)/*bē* (ZZ).
 I ask dad he can eat beef cannot
 ‘I asked Dad whether he could eat beef or not.’
- (47) *Guá m̄ng a-pah_k i_k ū* *tsiah gû-bah bô*.
 I ask dad he have eat beef NEG
 ‘I asked Dad whether he eats beef or not.’
- (48) *Guá m̄ng a-pah_k i_k sī* *Tâi-uân lâng m̄*.
 I ask dad he COP Taiwan person NEG
 ‘I asked Dad whether he is a Taiwanese or not.’

To sum up, we have identified *buē/bē*, *bô*, and *m̄* as negative markers that form VP-not questions (a.k.a. A-not-A questions). A-not-A questions, together with disjunctive questions and *wh*-questions, form a larger category of IS constituent questions and thus share some important syntactic and semantic properties. However, they still constitute distinctive subtypes due to other differences.¹⁶

16. It has been observed that VP-not questions (A-not-A questions) and interrogative *kám* questions exhibit island effects, while disjunctive questions with an overt *or* do not (Huang 1988a, Tang 1998, L.-S. Huang 2016, among others). Examples (i–ii) illustrate the distinction between disjunctive questions and VP-not questions (A-not-A questions) with respect to the sentential subject island. For the behavior of interrogative *kám* questions, see (69) in Section 5.1.

We thus do not conflate A-not-A questions with disjunctive questions with an overt *or*. Together they constitute the category of disjunctive questions, which, together with *wh*-questions, forms the category of IS constituent questions.

4.2 Sentence-final polar question particles or question tags?

The list of putative sentence-final particles in (32) is reduced to include only items which remain to be discussed, as in (49). We will first examine whether any of them behave like *nih*, a genuine polar question particle.

(49) *honnh*, *sī--bô*, *sī--m̄* (*sìm*), *sioh*, *hiò*

Consider (50) first, which involves a negative question. Similar to the case of *nih*, questions formed by the other particles, viz., *honnh*, *sī--bô*, *sī--m̄* (*sìm*), *sioh*, and *hiò*, can also be answered by truth-based yes-no answers. This is one property that CS questions have. The fact that they all have this trait suggests that they are semantically the same. With such a question, the interlocutor is expected to affirmatively confirm or negatively disconfirm the proposition presented.

- (50) a. Q: I buaih lâi honnh/sī--bô/sī--m̄(*sìm*)/sioh/hiò?
 he not.want come PQP
 'Is he not coming?'
 b. A: Sī--ah/Heh--ah/Tiòh--lah, (i buaih lâi).
 yes--PRT/yes--PRT/right--PRT he not.want come
 'No, he is not coming.'
 c. A: M̄-sī/Bô--ah/M̄-tiòh--ooh, (i beh lâi).
 no/no--PRT/not-right--PRT he want come
 'Yes, he is coming.'

Next, let's look at (51) and (52). In (51), neither *tàuté* nor *kámkóng* is compatible with a question formed by *honnh*. This makes *honnh* distinct from the other par-

-
- (i) [I tsiáh gû-bah iáh-sī bô tsiáh (gû-bah)] khah hó? (Disjunctive)
 he eat beef or NEG eat beef more good
 'Is it better that he eats beef or not eat beef?'
- (ii) a. *[I ū tsiáh gû-bah bô] khah hó? (VP-not)
 he have eat beef NEG more good
 'Is it better that he eats beef or not?'
- b. *[I sī-m̄-sī Tâi-uân lâng] khah hó? (A-not-A)
 he COP-NEG-COP Taiwan person more good
 'Is it better that he is a Taiwanese or not a Taiwanese?' (from Tang 1998: 187, (73b))

ticles, since the latter can co-occur with *kámkóng* in the same sentences, as in (52), just like *nih*. However, the incompatibility with *kámkóng* does not mean that *honnh* is ruled out as a polar question particle. According to Yang (1991), *honnh* is equivalent to the polar question particle *ba* in Mandarin. A speaker bears a strong presumption in mind when asking a question with *honnh* or *ba* and expects to receive a positive response. This contradicts the semantics of *kámkóng*, which involves the speaker's disbelief of the truth of the proposition. In terms of their incompatibility with *tàuté*, though, questions formed by these particles can all be safely categorized as CS questions.

- (51) a. *Lí tàuté beh tsiáh gû-bah honnh?
 you after.all want eat beef PQP
 b. *Lí kámkóng beh tsiáh gû-bah honnh?
 you don't.tell.me want eat beef PQP
- (52) a. *Lí tàuté beh tsiáh gû-bah sī--bô/sī--m̄(̀sì)m/sioh/hiò?
 you after.all want eat beef PQP
 b. Lí kámkóng beh tsiáh gû-bah sī--bô/sī--m̄(̀sì)m/sioh/hiò?
 you don't.tell.me want eat beef PQP
 'You want to eat beef? Don't tell me that you do. Do you?'

Examples (53) and (54) further show that questions formed by all these particles are immune to intervention effects, similar to *nih*. This serves as another piece of evidence for their being considered as CS questions.

- (53) Lí kan-na beh tsiáh gû-bah honnh?
 you only want eat beef PQP
 'Do you only want to eat beef?'
- (54) Lí kan-na beh tsiáh gû-bah sī--bô/sī--m̄(̀sì)m/sioh/hiò?
 you only want eat beef PQP
 'You only want to eat beef, don't you?'

One more piece of evidence is presented in (55). Questions formed by these particles, as well as *nih*, are quite difficult to embed as indirect questions. They can only be direct questions.

- (55) *Guá m̄ng a-pah_k i_k beh tsiáh gû-bah honnh/sī--bô/sī--m̄(̀sì)m/sioh/hiò.
 I ask dad he want eat beef PQP
 Intended: 'I asked Dad whether he wants to eat beef.'

The above observations suggest that each particle in (49) behaves similarly in terms of the given tests, and thus questions formed by them can undoubtedly be categorized as CS questions. However, we might question whether all of them

are genuine polar question particles. The answer is no. Some are genuine polar question particles but others are question tags. To differentiate question tags from polar question particles, we need additional tests.

A tag question is structurally different from a polar question, in that the former is argued to have a bi-clausal structure while the latter a mono-clausal structure (see Sailor 2012, Luo 2013). Thus, a tag can be viewed as independent of the matrix clause, but a polar question particle cannot. This structural difference suggests that if an item is a question tag, then it can stand alone, without being attached to a sentence; otherwise, it is a polar question particle. This is illustrated by (56)–(58), in which *sī--bô*, *sī--m̄* (*sìm*), *sioh*, and *hiò* can be used independently in the discourse, whereas *nih* and *honnh* cannot.

- (56) a. A: I tán--leh beh lâi.
 he later want come
 ‘He will come later.’
 b. B: *Nih?/Honnh?
 PQP
- (57) a. A: Tsit-pái ê khó-tshì khak-sit tsin kán-tan. Lí kóng sī--bô? /
 this-time MOD exam indeed very simple you say PQP(tag)
 Lí kóng sī--m̄ (*sìm*)?
 you say PQP(tag)
 ‘This time the exam is really simple; yes or no?’
 b. A: Sī--bô?/Sī--m̄ (*sìm*)? Lí mā kā lâng ìn-siann--tsit-ê.
 PQP(tag) you also KA person response--DEL
 ‘Yes or no? Give me a response in any case.’
 c. B: Hum,... guá kám-kak bô kán-tan--neh.
 INT I feel NEG simple--PRT
 ‘Well, I don’t think it’s easy.’
- (58) a. A: I tán--leh beh lâi.
 he later want come
 ‘He will come later.’
 b. B: Sioh?/Hiò?
 PQP(tag)
 ‘Is that so?’

Moreover, the structural difference between a tag question and a polar question also implies that in a sentence containing a tag, there should be a C head available in the host sentence while the tag occupies another C head in the dependent. Following this assumption, we thus argue that apart from a declarative host, tags should be able to be attached to questions. This prediction is borne out, as

illustrated by (59)–(60). Recall that we distinguish two forms of *kám*. Here we employ the interrogative *kám* to identify question tags, following Lau (2010b). The contrast between (59) and (60) serves as another piece of evidence to identify *nih* and *honnh* as genuine polar question particles, since they cannot co-occur with *kám*. The co-occurrence of a polar question particle and the interrogative *kám* would result in ungrammaticality because they compete for [+Q] feature checking when appearing in the same sentence. The remainders are question tags.

(59) *Lí kám siong-sìn kóng guá hāi-sí Ka-bûn nih/honnh?
 you KAM believe that I cause-death Ka-bûn PQP
 Intended: ‘Do you believe that I caused Ka-bûn’s death?’

(60) Lí kám siong-sìn kóng guá hāi-sí Ka-bûn sī--bô/sī--m̄(sim)/sioh/hiò?
 you KAM believe that I cause-death Ka-bûn PQP(tag)
 ‘Do you believe that I caused Ka-bûn’s death, don’t you?’

4.3 An interim summary

A number of interrogative sentence-final elements have been examined in this section. Of them, *nih* and *honnh* are polar question particles, *buē/bē*, *bô*, and *m̄* are negative markers, and *sī--bô*, *sī--m̄(sim)*, *sioh* and *hiò* are question tags. Questions ending with negative markers are A-not-A questions, a subtype of disjunctive questions, with properties of IS questions, while the other particles form CS questions.

As mentioned earlier, the three identities – negative markers, polar question particles and question tags – are historically related. It has been argued that polar question particles are often derived from sentence-final negative markers via grammaticalization (e.g., Wei 2007 and the references therein). We contend that question tags are also derived from two possible sources via grammaticalization, one from CS polar questions and the other from IS A-not-A questions. The derivational traces can still be found in the tags. For example, *sioh* is assumed to be a portmanteau word which combines the copula *sī* and the particle *--ooh*, and *sī--m̄(sim)* is obviously a contraction of the A-not-A constituent formed by the copula *sī*.

The four tags on our list can then be separated into two groups, in terms of the two distinct grammaticalization routes, with *sī--bô* and *sī--m̄(sim)* in one and *sioh* and *hiò* in the other. Such a distinction, though subtle, can be clearly revealed between (61a) and (61b). If the speaker thinks that A-ing is still in the hospital but wants to be sure, then (61a) is the question to ask. If, however, the

speaker is entirely uncertain whether A-ing is still in the hospital, (61b) is much more natural.¹⁷

- (61) a. A-ing iah-koh tī pēnn-īnn sioh/hiò?
 A-ing still at hospital PQP(tag)
 'A-ing is still in the hospital, right?'
 b. A-ing iah-koh tī pēnn-īnn sī--bô/sī--m̄(sim)?
 A-ing still at hospital PQP(tag)
 'A-ing is still in the hospital, yes or no?'

There might be some judgment variation among native speakers of TSM because language change is an ongoing process. In this case, some may think that the tags, especially *sī--bô* and *sī--m̄(sim)*, behave more like polar question particles (e.g., Tang 1998 thinks of *sī--bô* as an equivalence to *ma* in Mandarin). However, based on the syntactic evidence presented earlier, it is more plausible to regard them as question tags.

5. The status of *kám* questions

Another controversy concerns *kám* questions. In Section 5.1, we first distinguish two forms of *kám* and then present two opposite views on the status of *kám* questions. In Section 5.2, we argue that the interrogative *kám* questions should be analyzed as A-not-A questions. A potential challenge to the treatment of the interrogative *kám* questions as A-not-A questions, which is concerned with the focus effects of *kám*, is dealt with in Section 5.3. An interim summary is given in Section 5.4.

5.1 Two forms of *kám*

Previous studies on TSM questions diverge in the treatment of *kám* questions. The dominant view is that *kám* questions are polar questions (e.g., Cheng 1977, 1997, Tang 1998, 1999, Hsieh 2001, Lau 2010a, Wu 2016), while some researchers (e.g., Huang 1988a, 1991, Huang, Li & Li 2009, L.-S. Huang 2016) claim that they are A-not-A questions. This disagreement is rooted in their different views of *kám*. We will demonstrate that there are in fact two forms of *kám*; one, dubbed

17. We did a fieldwork study on the contrast between (61a) and (61b). Our informants were six native TSM speakers from the Taichung-Changhua-Nantou region, Hsinchu city and Tainan county, two in the 40-to-55 age group and four in the 65-to-75 age group. They all agreed with the judgement here.

the interrogative *kám*, is a portmanteau word of the modal *kánn* and negation,¹⁸ thus similar to the Mandarin *ke* contracted from *ke-fou* ‘whether’ (Her, Che & Bodomo to appear), while the other is a contracted form of *kámkóng*, an adverb that resembles the Mandarin *nandao* exclusive to polar questions.¹⁹ Previous disagreement over the status of *kám* questions is thus in part due to this dual status of *kám* (e.g., Cheng 1977, 1997, Tang 1998, 1999, Wu 2016). Examples involving the two forms of *kám*, the interrogative *kám* and the adverbial *kám*, are presented in (62)–(63), respectively.²⁰

18. Yue-Hashimoto (1991:186–187) contends that *kám* is derived from the fusion of the modal *ke* and negation, and she argues that the reason why negation is suffixed to *ke* is because of word order changes. In Wei’s (2010) study on the origin of the M(odal)-neg-V(N)P construction in Mandarin, he also relates *kám* to M-neg, in which *ke* is a plausible candidate for M, but different from Yue-Hashimoto’s (1991) view about the cause behind the formation of *kám*, Wei (2010:380) suggests that it is more likely that the interrogative *kám*, as a combination of M-neg, is formed by gradually turning a rhetorical question into a neutral question. Following Yue-Hashimoto (1991) and Wei (2010), we agree that the interrogative *kám* originates from the combination of a modal and negation, but we argue that a more likely candidate for M is *kánn* rather than *ke*, in that *kánn* has a modal use, meaning ‘probably, supposedly’ (Embree 1984; see also Lien 2011 for different uses of *kánn* and *kám*). However, *khó*, the TSM counterpart of *ke*, has never been a modal in TSM.

19. The adverb *kámkóng* can appear in the same position as *nandao*, but there are some distributional restrictions on its contracted form, the adverbial *kám*. As shown in (i), the adverbial *kám* cannot occur sentence-initially, different from its full form.

- (i) Kámkóng/*Kám, lí tō bē-īng-tit koh khó-lū--tsit-ē nih?
 don’t.tell.me you CCONJ cannot again think.OVER--DEL PQP
 ‘Can you think it over again? Don’t tell me that you couldn’t.’

One may wonder why such restrictions exist between a full form and its contracted form. However, it is easy to find similar cases – the adverb *changchang* ‘frequently, often’ and its contracted form *chang* for example:

- (ii) Changchang/*Chang, wo xiangqi na shuang shou...
 frequently I think.of that pair hand
 ‘I often think of that pair of hands...’

The reason why the distribution of the adverbial *kám* is limited is just like that behind the case of *changchang* versus *chang*.

20. There are at least two ways to clearly distinguish the two forms of *kám*, one with resort to the concessive conjunction *tō* and the other with the help of a neutral scenario. Consider (i) and (ii).

- (i) Lí kám tō tsai-iánn bīn-á-tsài ài khui-huē?
 you don’t.tell.me CCONJ know tomorrow have.to hold-meeting
 ‘(Even though he knew,) don’t tell me that you knew as well that there will be a meeting tomorrow.’

(62) Lí kám tsai-iánn bîn-á-tsài ài khui-huē?
 you KAM know tomorrow have.to hold-meeting
 'Do you know that there will be a meeting tomorrow?'

(63) Guá bô-huat-tōo, lí kám tō bô-huat-tōo?
 I couldn't you don't.tell.me CCONJ couldn't
 'Although I couldn't, don't tell me that you couldn't as well.'

(from the TV drama, *Coolie*)

As illustrated in (64)–(66), the A-not-A interrogative *kám*, as a combination of the modal *kánn* and negation, is thus compatible with the adverb *tàuté* but incompatible with *kámkóng*, and cannot co-occur with the polar question particle *nih*. In contrast, the adverbial *kám*, as a contraction of *kámkóng*, is incompatible with *tàuté* and can co-occur with the polar particle *nih*. The adverbial *kám* contributes the same meaning to the question as its full form *kámkóng*.

(64) a. Lí tàuté kám tsai-iánn bîn-á-tsài ài khui-huē?²¹
 you after.all KAM know tomorrow have.to hold-meeting
 'After all, do you know that there will be a meeting tomorrow or not?'

b. *Lí kámkóng kám tsai-iánn bîn-á-tsài ài khui-huē?
 you don't.tell.me KAM know tomorrow have.to hold-meeting

(65) a. *Guá bô-huat-tōo, lí tàuté kám tō bô-huat-tōo?
 I couldn't you after.all don't.tell.me CCONJ couldn't

b. Guá bô-huat-tōo, lí kámkóng tō bô-huat-tōo?
 I couldn't you don't.tell.me CCONJ couldn't
 'Although I couldn't, don't tell me that you couldn't as well.'

(ii) Lí ũ siu-tiòh thong-ti bô? Lí kám tsai-iánn bîn-á-tsài ài
 you have receive announcement NEG you KAM know tomorrow have.to
 khui-huē?
 hold-meeting
 'Did you receive the announcement? Do you know that there will be a meeting tomorrow?'

In (i), as compared to (62), *kám* can only be interpreted as the adverbial *kám*, like (63), when the concessive conjunction *tō* is added. In (ii), in addition, the interrogative *kám* is the undoubtedly preferred use when a neutral scenario is given. We thank the reviewer for urging us to clarify this point.

21. Note that (64a), (72a) and (73a) have been double checked for acceptability and grammaticality with the native informants we consulted. Similar examples can be found in a few TSM corpora (e.g., Taiwanese Concordancer, established by Iúnn 2003) and some previous studies (e.g., L.-S. Huang 2016).

- (66) a. *Lí kám tsai-iánn bîn-á-tsài ài khui-huē nih?²²
 you KAM know tomorrow have.to hold-meeting PQP
 Intended: 'Do you know that there will be a meeting tomorrow?'
 b. Guá bô-huat-tōo, lí kám tō bô-huat-tōo nih?
 I couldn't you don't.tell.me CCONJ couldn't PQP
 'Although I couldn't, don't tell me that you couldn't as well.'

It is clear from the above examples that the adverb *kám* only appears in polar questions and the interrogative *kám* forms an A-not-A question, which belongs to IS constituent questions. Evidence from intervention effects in (67) and the availability of indirect question counterparts in (68) further supports this distinction.

- (67) a. *Lí kan-na kám beh tsiáh gû-bah?
 you only KAM want eat beef
 b. Lí kám kan-na beh tsiáh gû-bah?
 you KAM only want eat beef
 'Do you only want to eat beef?'
 (68) Guá m̄ng a-pah_k i_k kám ū tsiáh gû-bah.
 I ask dad he KAM have eat beef
 'I asked Dad whether he eats beef or not.'

The distinction between the adverbial *kám* and the interrogative *kám* has often been overlooked in previous studies. Consequently, both camps, i.e., the mainstream view of *kám* questions as yes-no questions and the non-mainstream view of *kám* questions as A-not-A questions, are correct, but only partially.

In the mainstream camp, Cheng (1977, 1997) explicitly asserts that *kám* questions are yes-no questions, because *kám* is closest to the yes-no question particle *ma* in Mandarin, both of which can be used in the three sub-types of yes-no questions: presumptive, non-presumptive, and rhetorical ones. For the following reasons, Tang (1998, 1999) also treats *kám* questions as yes-no questions and draws an analogy between *kám* and the Mandarin adverb *nandao*. First, a sentence-final question particle *sī--bô*, which he assumes is equal to the Mandarin question particle *ma* but we have shown is an A-not-A tag, can be attached to *kám* questions. Second, he argues that *kám* questions can be answered by using the yes/no particles and the judgment particle *tióh* 'right' (cf. Wang & Lien 1995). Third, he shows that only the adverb *tsin-tsiànn* 'for real', rather than *tàuté*, can appear in *kám* questions, and that *kám* must take wide scope over *tsin-tsiànn*, but not the other way around. The final argument Tang provides in support of his proposal is that

22. Note that (66a) is unacceptable in a neutral scenario; see (ii) in fn. 20.

kám questions can only be direct questions and cannot be embedded as sentential subjects or relative clauses, as in (69), from Tang (1998:189, (79)).

- (69) a. *[Bín-á-tsài kám ē lōh-hōo] bô (siánn) kuan-hē/ khah hó?
 tomorrow KAM will rain NEG what matter more good
 Intended: ‘Doesn’t it matter / Is it better that it will rain tomorrow?’
- b. *Lán ták-ke lâi thó-lūn [i kám ē-hiáu Ing-gí] ê bün-tê.
 we everyone come discuss he KAM can English MOD question
 Intended: ‘Let’s discuss the question as to whether he can speak English.’
- c. *Guá bat hit-ê [in lâu-pē kám sī tìn-tiúnn] ê hák-sing.
 I know that his father KAM COP mayor MOD student
 Intended: ‘I know the student whose father is a mayor.’

In addition, Hsieh (2001), Lau (2010a) and Wu (2016) also contend that *kám* questions are yes-no questions because they can be answered with the yes/no particles, which is considered “the key hallmark of the yes-no question type” (Lau 2010a: 100).

As to a structural analysis of the adverbial *kám*,²³ Hsieh (2001) proposes that *kám*, which marks a yes-no question, is base-generated in T, higher than QP, which hosts A-not-A questions and VP-not questions. Similarly, in Wu (2016), *kám* is analyzed to be in T or C, bearing the question operator feature [\pm Pol]. Based on his observation that *kám* always precedes the focus marker *sī*,²⁴ which can be overt or covert, and the assumption that focus is a functional projection in the CP domain (see, e.g., Rizzi 1997), Lau (2010a) analyzes *kám* as a focus operator which binds the focused constituent after it, base-generated in the specifier position of FocP and forced to move to MoodP for [+Q] feature checking.

On the other hand, in the non-mainstream camp, to the best of our knowledge, the main advocates of the categorization of *kám* questions as the A-not-A question type are Huang (1988a, 1991) and L.-S. Huang (2016).²⁵ Based on Zhu’s (1985, 1991) observation that *kám* questions and A-not-A questions are mutually exclusive in TSM, Huang (1991:324) contends that “*kám* questions and A-not-A questions are different realizations of the same element in different dialects.” Huang (1988a, 1991) analyzes *kám* as a realization of [+Q] (or [+A-not-A]) later

23. For more alternative analyses of *kám*, readers are referred to C.-R. Huang (1988) and Shen (1997). The former analyzes *kám* as a second-position sentential clitic, while the latter proposes that *kám* is a raising verb.

24. It has been argued that the copular verb *shi* in Mandarin can be a focus marker, indicating that some or all of its complement is focused (Teng 1979, Huang 1988b). This property is also found in *sī*, the TSM counterpart of Mandarin *shi*.

25. Huang, Li & Li (2009) is basically a reiteration of Huang (1988a, 1991), so it is not mentioned here.

present in Huang, Li & Li 2009) in INFL, just like the V-not-VP type of question. L.-S. Huang (2016) also argues that *kám* questions are questions of the A-not-A type, but different from Huang's (1988a, 1991) proposal, he suggests that *kám* questions are a counterpart of Mandarin VP-not-V questions. In L.-S. Huang (2016), *kám* questions are assumed to be historically derived from *kám*+VP-neg questions with the sentence-final negative particle later dropped. That is why both *kám* questions and VP-neg questions in TSM have similar syntactic behavior but appear in complementary distribution, according to L.-S. Huang. Given that *kám* displays focus properties (cf. Lau 2010a) and negation, which is under TP, can appear between *kám* and the focus marker *sī*, as in (70), he analyzed *kám* to be base-generated in the specifier of PolP under TP and undergo LF movement to the specifier of CP for [+Q] feature checking.

- (70) a. *Kám m̄ sī A-bîng kin-á-jit tong-tit?*
 KAM NEG COP A-bîng today on-duty
 'It is A-bîng who is on duty today, isn't it?'
 b. *A-bîng kám m̄ sī kin-á-jit tong-tit?*
 A-bîng KAM NEG COP today on-duty
 'It is today that A-bîng is on duty, isn't it?' (L.-S. Huang 2016: 22, (26))

It is obvious that the mainstream camp has mixed up the adverbial *kám* and the interrogative *kám*, while the non-mainstream camp has focused their discussion only on the interrogative *kám* questions. In the next subsection, we will present evidence against seeing interrogative *kám* questions as yes-no questions and thus demonstrate that they are A-not-A questions.

5.2 The interrogative *kám* questions as A-not-A questions

Following Huang (1988a, 1991), we contend that the interrogative *kám* questions are of the V-not-VP type and will thus defuse the putative arguments for treating them as yes-no questions, including the response patterns, the incompatibility with the adverb *tàuté*, and the inability to be indirect questions (Tang 1998, 1999). First of all, as shown in (71), the interrogative *kám* questions cannot be answered by using the (truth-based) yes/no particles; instead, the interlocutor answers the questions by using the main predicates directly.

- (71) a. Q: *Lí kám tsai-iánn bîn-á-tsài ài khui-huē?*
 you KAM know tomorrow have.to hold-meeting
 'Do you know that there will be a meeting tomorrow?'
 b. A: *Tsai--ah/M̄-tsai--neh.*
 know--PRT/NEG-know--PRT
 'I know. / I don't know.'

- c. A: *Heh--ah/Tiòh--lah/Bô--ah/M̄-tiòh--ooh.
yes--PRT/right--PRT/NO--PRT/not-right--PRT

Furthermore, (72)–(73), as well as (64) above, all show that the interrogative *kám* questions are indeed compatible with *tàuté*.

- (72) a. Lí tàuté kám tsai-iánn tsit kiánn tã-tsi m̄-tiòh ê lâng sī lí?
you after.all KAM know this CL matter wrong MOD person COP you
'After all, do you know you are wrong on this matter?'
b. *Lí kámkóng kám tsai-iánn tsit kiánn tã-tsi m̄-tiòh ê lâng sī lí?
you don't.tell.me KAM know this CL matter wrong MOD person COP lí?
you
- (73) a. I tàuté kám ē lâi?
he after.all KAM will come
'After all, will he come or not?'
b. *I kámkóng kám ē lâi?
he don't.tell.me KAM will come

Tang (1998, 1999) takes the adverb *tsin-tsiànn* 'for real' as a test for distinguishing between yes-no and A-not-A questions, arguing that *kám* questions are yes-no questions because *tsin-tsiànn* can appear in these questions. However, this is not a reliable test because *tsin-tsiànn* can be used in a declarative sentence, as in (74), not only in a question, and the wide-scope reading of *tsin-tsiànn* in *kám* questions (i.e., *tsin-tsiànn* c-commanding *kám*) is also unavailable, as in (75), from Tang (1998:189, (78a)).

- (74) I tsin-tsiànn beh tsiáh gû-bah.
he for.real want eat beef
'He wants to eat beef for real.'

- (75) ? *I tsin-tsiànn kám ē lâi?
he for.real KAM will come
Intended: 'Will he come for real?'

In addition, (68), repeated as (76), illustrates that it is possible for the interrogative *kám* questions to be indirect questions. Hsieh (2001), Lau (2010a) and L.-S. Huang (2016) provide examples to show that the interrogative *kám* questions can be embedded as indirect questions by predicates like *huài-gí* 'doubt' and *siünn-beh tsai-iánn* 'wonder; want to know'. Actually, as indicated by Shen (1997) and L.-S. Huang (2016), what Tang (1998, 1999) observes, as shown in (69), is the

island sensitivity of *kám*, which can also be found in A-not-A questions (e.g., R.-H. Huang 2008, Huang, Li & Li 2009).²⁶

- (76) Guá mǎng a-pah_k i_k kám ū tsiáh gū-bah.
 I ask dad he KAM have eat beef
 'I asked Dad whether he eats beef or not.'

Note that the same evidence against the interrogative *kám* questions as yes-no questions supports the view that they are A-not-A questions. Furthermore, the proposal that the interrogative *kám* is a portmanteau word of the modal *kánn* and negation corresponds to the formation of A-not-A questions proposed in Huang (1988a, 1991) and Huang, Li & Li (2009), in which the A-not-A construction (more specifically, the A-not-AB type) is argued to be formed by [+Q] (or [+A-not-A]) in INFL triggering reduplication of the following predicate with the insertion of a negative morpheme in between the original predicate and its copy. Without resort to reduplication, the interrogative *kám* serves as an alternative realization of [+Q] or [+A-not-A].

Example (77) is provided by Lau (2010a: 39, (38)) to argue against Huang's (1988a, 1991) claim that (interrogative) *kám* questions are a TSM counterpart of Mandarin A-not-A questions, for according to Lau (2010a: 39), "unlike A-not-AB questions, a *kám* question can either be followed with negation or not."

- (77) a. I kám beh lâi?
 he KAM will come
 'Will he come?'
 b. I kám bô beh lâi?
 he KAM NEG will come
 'Will he not come?'

However, this does not pose a challenge to the treatment of *kám* questions as A-not-A questions and the interrogative *kám* as a fusion of the modal *kánn* and negation, because some genuine A-not-A questions in Mandarin, as shown in (78), can also take another negation. Similarly, as (79) shows, there is no problem for a question with *shi-fou* or *ke-fou* 'whether' taking another negation.

- (78) Ni shi-bu-shi bu chi niurou?
 YOU COP-NEG-COP NEG eat beef
 'Is it the case that you don't eat beef?'

26. According to R.-H. Huang (2008) and Huang, Li & Li (2009), the A-not-A constituent undergoes LF movement to CP, "causing that CP to be interpreted as a question" (Huang, Li & Li 2009: 255). Thus, A-not-A questions exhibit island and intervention effects. We argue that *kám*, as a variant of the A-not-A constituent, also moves to CP at LF.

- (79) a. Ni shi-fou bu chi niurou?
 you whether NEG eat beef
 ‘Is it the case that you don’t eat beef?’
 b. Ni ke-fou bu chi niurou?
 you whether NEG eat beef
 ‘Is it possible for you not to eat beef?’

5.3 The focus effects of the interrogative *kám*

According to Lau (2010a), the interrogative *kám*, as a focus operator, binds the constituent after it. Thus, the subject receives the focus when the interrogative *kám* appears sentence-initially, the adjunct would be the focus when *kám* precedes it, and the whole proposition is focused when *kám* occurs before the predicate. Lau (2010a) argues that the position in which the interrogative *kám* occurs influences the interpretation of a sentence; see (80), from Lau (2010a: 113, (35)). Based on this, Lau claims that the interrogative *kám* is not equivalent to *shi-fou* ‘whether’ in Mandarin, since among the three positions, *shi-fou* in whichever position receives the same interpretation as (80c). In other words, *shi-fou* can only mark the focus over and make an inquiry about the whole proposition. The focus effects of the interrogative *kám* thus become a challenge to the treatment of *kám* questions as A-not-A questions in Huang’s (1988a, 1991) sense (cf. Hsieh 2014).

- (80) a. Kám A-bíng kin-á-jit beh khi Tâi-pak khui-huē?
 KAM A-bíng today will go Taipei attend-meeting
 ‘Is it A-bíng who is going to attend a meeting in Taipei?’
 b. A-bíng kám kin-á-jit beh khi Tâi-pak khui-huē?
 A-bíng KAM today will go Taipei attend-meeting
 ‘Is it today that A-bíng is going to attend a meeting in Taipei?’
 c. A-bíng kin-á-jit kám beh khi Tâi-pak khui-huē?
 A-bíng today KAM will go Taipei attend-meeting
 ‘Is A-bíng going to attend a meeting in Taipei today?’

However, this dubious contrast between the interrogative *kám* and *shi-fou* is just an illusion resulting from the unpronounced focus marker *sī*. Adopting the idea that the focus marker *shi* in Mandarin marks the position where the focus alternatives are computed (Paul & Whitman 2008, Erlewine 2011), we argue that its TSM counterpart, viz., *sī*, has the same function. Because the focus marker *sī* usually co-occurs with *kám*, either overtly or covertly, the constituent that immediately follows *kám* and *sī* is then focused. Therefore, the subject in (80a) and the adjunct in (80b) receive the focus in that it can be assumed that an unpronounced *sī* is involved, right after *kám*, marking the projection where the focus alterna-

tives are computed and where the questioned part is. In other words, the so-called focus effects of *kám* actually come from *sī* rather than *kám*.

Consider (81) and (82). In (81), the interrogative *kám* appears sentence-medially, before the predicate. In this case, the constituent right after *kám*, which indicates the manner of A-bîng's going to school, is focused and questioned, instead of the whole proposition. We can assume the existence of the focus marker *sī* in (81), so that the position of alternative set computation and interpretation by means of "Association with Focus" (Rooth 1985) is marked on the manner. In contrast, in cases where *sī* is unlikely to occur, such as (82), the focused constituent is the proposition and the inquiry is about whether or not A-bîng has taken a bus to Taipei. This is made clear by B's response in (82).

(81) A: A-bîng tsa-hng kám [kiänn-lōo]_F khì hák-hāu--ê?²⁷
 A-bîng yesterday KAM walk-road go school--PRT
 'Did A-bîng walk to school yesterday?'

B: I tsē tshia khì--ê.
 he take bus go--PRT
 'He took a bus to school.'

(Shen 1997: 22, (40))

(82) A: A-bîng kám ū tsē tshia khì Tâi-pak--ah?
 A-bîng KAM have take bus go Taipei--PERF
 'Has A-bîng taken a bus to Taipei?'

B: Iah-buē, i iah-koh tī tshù--lí.
 not,yet he still at home--inside
 'Not yet; he is still at home.'

Therefore, the argument against the parallel between the interrogative *kám* and *shi-fou* 'whether' (or its kin) with respect to focus is untenable and is in effect not a challenge to the analysis of the interrogative *kám* as a realization of [+A-not-A].

A look at focus can actually provide evidence in support of treating interrogative *kám* questions as A-not-A alternative questions. It has been argued that the questioned position in a constituent question correlates with the position of focus in an answer to the question (see Rooth 1992, 1997 for example). This question-answer congruence is shown in (83), in which A's response is appropriate for the question while B's response is inappropriate because of the position of focus.

(83) Q: Who wants coffee?
 A: [John]_F wants coffee.
 B: #John wants [coffee]_F.

27. The focus marking is our annotation.

The question-answer paradigm suggests that the questioned position is also the focus, which evokes an alternative set including propositions of the form, say, “x wants coffee” for (83). Rooth (1992, 1997) points out that the ultimate source of the alternative set is the semantics of questions. Following this vein, therefore, we can say that in (82), the interrogative *kám* is the focus, evoking the alternative set containing two propositions, the positive and negative versions of the prejacent, and thereby respecting the A-not-A formation.

Accordingly, consider further the cases where the focus marker *sī* is present in *kám* questions, such as (84). It can be assumed that two foci are involved in the question in (84), the interrogative *kám* and the focused constituent “walk” marked by *sī*. These two foci evoke two alternative sets, as shown in (85). We can see from B’s response in (84) that the two alternative sets are at work in turn. When the negative proposition in the first alternative set provided by *kám* is chosen, all propositions in the second alternative set can then be identified except for the positive proposition that has been rejected in the first round. Our account of (84) can also be applied to cases involving an unpronounced *sī* such as (81).

(84) A: Lín hāu-senn kám sī ē-hiáu [kiānn-lōo]_F--ah?

your son KAM FM CAN walk-road--PERF

‘Is your son able to walk now?’

B: Iah-buē--lah, i tú ē-hiáu tsē niā-niā.

not.yet--PRT he just can sit only

‘Not yet. He is only able to sit.’

(85) a. *Kám*: {‘Your son is able to walk,’ ‘Your son is not yet able to walk.’}

b. *Sī*(P): {‘Your son is able to walk,’ ‘Your son is able to sit,’
‘Your son is able to crawl,’ ...}

5.4 An interim summary

In this section, we have argued for the necessity of distinguishing two forms of *kám*, the adverbial and the interrogative. In terms of their distinct syntactic behavior, the two types of *kám* questions are classified into two different categories: IS constituent and CS polar questions. In addition, we argue against the view of interrogative *kám* questions being yes-no questions, and take the stance on the status of the interrogative *kám* questions in line with Huang (1988a, 1991). We propose that the interrogative *kám* is a portmanteau word of the modal *kánn* and a negator, which corresponds to the formation of A-not-A questions proposed in Huang (1988a, 1991) and Huang, Li & Li (2009). The focus effects of the interrogative *kám* have also been discussed and ruled out as a potential challenge to this analysis.

6. Concluding remarks

In this paper, we argue for a two-way taxonomy, which distinguishes CS polar questions, or yes-no questions, as an independent category from all other forms of questions, which form the other category, IS constituent questions, where disjunctive questions and *wh*-questions are the two subtypes, and A-not-A questions are in turn a subtype of disjunctive questions. We have justified this two-way distinction of questions in TSM by adapting and applying a suite of semantic and syntactic tests assembled from a number of previous studies. The existence of CS polar questions has also been attested with the particles *nih* and *honnh* identified.

Two controversial issues over the status of interrogative sentence-final particles and *kám* questions have also been discussed in detail. First, we show that *buē/bē*, *bô*, and *m̄* are simply negative markers and questions ending with them pattern with disjunctive and *wh*-questions, thus belonging to the category of IS constituent questions. We then distinguish *nih* and *honnh* from *sī--bô*, *sī--m̄(sim)*, *sioh* and *hiò*, though they all share the common properties of CS questions. We identify the former items as genuine polar question particles and the latter as question tags: *sī--bô* and *sī--m̄(sim)* as A-not-A tags and *sioh* and *hiò* as polar tags. Furthermore, contra the dominant view that *kám* questions are yes-no questions, we show that *kám* questions are questions of the A-not-AB type in the sense of Huang (1988a, 1991), thereby being categorized as IS constituent questions. Crucially, we argue for the necessity of distinguishing two forms of *kám*. The adverbial *kám*, which is the contracted form of *kámkóng*, is only compatible with CS polar questions, just like its Mandarin counterpart *nandao*. On the other hand, the interrogative *kám*, which is a portmanteau word of the modal *kánn* and the negator *m̄*, forms a *whether-or-not* disjunctive question. Therefore, only the adverbial *kám* can appear with genuine polar question particles, i.e., *nih* and *honnh*.

The successful application of the binary distinction of CS versus IS questions to Taiwan Southern Min further supports that this two-way taxonomy is applicable cross-linguistically.

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List of abbreviations

ASP	aspect marker	KA	goal marker <i>kā</i>
CCONJ	concessive conjunction	KAM	the interrogative <i>kám</i>
CL	classifier	MOD	modification marker
COP	copula	NEG	negative marker
CQP	constituent question particle	PERF	perfective marker
DEL	delimitative aspect marker	PQP	polar question particle
EXP	experiential aspect marker	PROG	progressive marker
FM	focus marker	PRT	particle
INT	interjection		

References

- Beck, Sigrid. 1996. Wh-constructions and Transparent Logical Form. Doctoral dissertation, University of Tübingen, Tübingen, Germany.
- Beck, Sigrid. 2006. Intervention effects follow from focus interpretation. *Natural Language Semantics* 14:1–56. <https://doi.org/10.1007/s11050-005-4532-y>
- Beck, Sigrid, and Shin-Sook Kim. 1997. On *wh*- and operator scope in Korean. *Journal of East Asian Linguistics* 6:339–384. <https://doi.org/10.1023/A:1008280026102>
- Bhatt, Rajesh, and Veneeta Dayal. 2020. Polar question particles: Hindi-Urdu *kya*:. *Natural Language & Linguistic Theory* 38:1115–1144. <https://doi.org/10.1007/s11049-020-09464-0>
- Bolinger, Dwight. 1978. Yes-no questions are not alternative questions. *Questions*, ed. by Henry Hiz, 87–105. Dordrecht, the Netherlands: Reidel. https://doi.org/10.1007/978-94-009-9509-3_3
- Chen, Matthew Y. 1987. The syntax of Xiamen tone sandhi. *Phonology Yearbook* 4:109–149. <https://doi.org/10.1017/S0952675700000798>
- Cheng, Robert Liang-Wei. 1977. Taiwanese question particles. *Journal of Chinese Linguistics* 5:153–185.
- Cheng, Robert Liang-Wei. 1997. Taiyu, Huayu de Jiegou ji Dongxiang III: Tai, Huayu de Shikong, Yiwen yu Fouding. [Taiwanese and Mandarin Structures and Their Developmental Trends in Taiwan III: Temporal and Spatial Relations, Questions and Negatives in Taiwanese and Mandarin.] Taipei: Yuan-Liou Publishing Company.
- Chou, Chao-ting Tim. 2005. On the Syntax-Pragmatics Interface in Chinese: A Case Study of the Attitudinal Adverb *Daodi*. MA thesis, National Chiao Tung University, Hsinchu.
- Embee, Bernard L. M. (ed.) 1984. *A Dictionary of Southern Min [Taiwanese-English Dictionary]*. Taipei: Taipei Language Institute.

- Erlewine, Michael Yoshitaka. 2011. Sentence-final *only* and the interpretation of focus in Mandarin Chinese. *The Proceedings of the 22nd North American Conference of Chinese Linguistics (NACCLS-22) and the 18th Annual Meeting of the International Association of Chinese Linguistics (IACL-18)*, ed. by Lauren Eby Clemens and Chi-Ming Louis Liu, 18–35. Columbus, OH: NACCL Proceedings Online, The Ohio State University.
- Hamblin, Charles Leonard. 1958. Questions. *Australasian Journal of Philosophy* 36.3:159–168. <https://doi.org/10.1080/00048405885200211>
- Hamblin, Charles Leonard. 1973. Questions in Montague English. *Foundations of Language* 10.1:41–53.
- Han, Chung-Hye, and Maribel Romero. 2004. The syntax of *whether/Q...or* questions: Ellipsis combined with movement. *Natural Language & Linguistic Theory* 22:527–564. <https://doi.org/10.1023/B:NALA.0000027674.87552.71>
- Her, One-Soon, Dewei Che, and Adams Bodomo. (to appear). On a two-way distinction of questions: A case study of Mandarin and Xiang. *The Linguistic Review*.
- Holmberg, Anders. 2016. *The Syntax of Yes and No*. Oxford: Oxford University Press.
- Hsieh, Miao-Ling. 2001. Form and Meaning: Negation and Questions in Chinese. Doctoral dissertation, University of Southern California, Los Angeles.
- Hsieh, Miao-Ling. 2014. Taiwanese Hokkieh/Southern Min. *The Handbook of Chinese Linguistics*, ed. by C.-T. James Huang, Y.-H. Audrey Li and Andrew Simpson, 629–656. Oxford: Wiley-Blackwell. <https://doi.org/10.1002/9781118584552.ch24>
- Huang, C.-T. James. 1988a. Hanyu zhengfan wenju de mozu yufa [A modular grammar of Chinese A-not-A questions]. *Zhongguo Yuwen* 204:247–264.
- Huang, C.-T. James. 1988b. Shuo shi he you [On ‘be’ and ‘have’ in Chinese]. *The Bulletin of the Institute of History and Philology, Academia Sinica* 59.1:43–64.
- Huang, C.-T. James. 1991. Modularity and Chinese A-not-A questions. *Interdisciplinary Approaches to Language*, ed. by Carol Georgopolous and Roberta Ishihara, 305–332. Dordrecht, the Netherlands: Kluwer Academic Publishers. https://doi.org/10.1007/978-94-011-3818-5_16
- Huang, C.-T. James, and Masao Ochi. 2004. Syntax of the hell: Two types of dependencies. *Proceedings of the 34th Conference of the North Eastern Linguistic Society*, ed. by Keir Moulton and Matthew Wolf, 279–294. Amherst, MA: GLSA Publications, University of Massachusetts.
- Huang, C.-T. James, Y.-H. Audrey Li, and Yafei Li. 2009. *The Syntax of Chinese*. New York, NY: Cambridge University Press. <https://doi.org/10.1017/CBO9781139166935>
- Huang, Chu-Ren. 1988. Towards a morphosyntactic account of Taiwanese question particle *kam*. *Bulletin of the Institute of History and Philology, Academia Sinica* 59.2:425–447.
- Huang, Lu-Shan. 2016. A Study of *Kam* Questions in Taiwan Southern Min. MA thesis, National Sun Yat-sen University, Kaohsiung.
- Huang, Rui-Heng Ray. 2008. Deriving VP-neg questions in modern Chinese: A unified analysis of A-NOT-A syntax. *Taiwan Journal of Linguistics* 6.1:1–54.
- Huddleston, Rodney. 1994. The contrast between interrogatives and questions. *Journal of Linguistics* 30.2:411–439. <https://doi.org/10.1017/S002226700016704>
- Iúnn, Ûn-giàn. 2003. Tai-Gu-Bun Gu-Su Kiam-Sek [Taiwanese Concordancer]. Retrieved February 26, 2021, from <http://210.240.194.97/tg/concordance/form.asp>
- Jones, B. Morris. 1999. *The Welsh Answering System*. Berlin & New York: Mouton de Gruyter. <https://doi.org/10.1515/9783110800593>

- Kim, Shin-Sook. 2002. Intervention effects are focus effects. *Japanese/Korean Linguistics* 10, ed. by Noriko Akatsuka and Susan Strauss, 615–628. Stanford, CA: CSLI Publications.
- Kuno, Susumu. 1973. *The Structure of the Japanese Language*. Cambridge, MA: MIT Press.
- Lau, Seng-hian. 2010a. Syntax of *Kám* Questions in Taiwanese. MA thesis, National Taiwan Normal University, Taipei.
- Lau, Seng-hian. 2010b. Excising tags: Distinguishing between interrogative SFPs and tag questions in Taiwanese. *Taiwan Journal of Linguistics* 8.1:1–28.
- Lien, Chinfa. 2011. Exploring three kinds of the DARE word in Southern Min: Sidelights on the hierarchical structure of functional categories. *Bulletin of Chinese Linguistics* 4.2:271–283. <https://doi.org/10.1163/2405478X-90000064>
- Lin, Huei-Lin. 2004. Lexical vs. syntactic negation in Taiwanese. *Concentric: Studies in Linguistics* 30.1:107–128.
- Lin, Jo-wang. 1994. Lexical government and tone group formation in Xiamen Chinese. *Phonology* 11.2:237–275. <https://doi.org/10.1017/S0952675700001962>
- Luo, Tianhua. 2013. Interrogative Strategies: An Areal Typology of the Languages of China. Doctoral dissertation, University of Konstanz, Konstanz, Germany.
- Paul, Waltraud, and John Whitman. 2008. *Shi ... de* focus clefts in Mandarin Chinese. *The Linguistic Review* 25:413–451. <https://doi.org/10.1515/TLIR.2008.012>
- Pesetsky, David. 2000. *Phrasal Movement and Its Kin*. Cambridge, MA: MIT Press. <https://doi.org/10.7551/mitpress/5365.001.0001>
- Pope, Emily Norwood. 1976. *Questions and Answers in English*. Mouton: The Hague.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. *Elements of Grammar*, ed. by Liliane Haegeman, 281–337. Dordrecht the Netherlands: Kluwer Academic Publishers. https://doi.org/10.1007/978-94-011-5420-8_7
- Rooth, Mats. 1985. Association with Focus. Doctoral dissertation, University of Massachusetts, Amherst.
- Rooth, Mats. 1992. A theory of focus interpretation. *Natural Language Semantics* 1:75–116. <https://doi.org/10.1007/BF02342617>
- Rooth, Mats. 1997. Focus. *The Handbook of Contemporary Semantic Theory*, ed. by Shalom Lappin, 190–210. Oxford: Blackwell Publishing.
- Sadock, Jerrold, and Arnold Zwicky. 1985. Speech act distinctions in syntax. *Language Typology and Syntactic Description*, ed. by Timothy Shopen, 155–196. Cambridge, UK: Cambridge University Press.
- Sailor, Craig. 2012. Tag Questions and the Typology of VP Ellipsis. Retrieved January 6, 2021, from http://www.craigsailor.net/papers/sailor_tagQs_and_VPE.pdf
- Shen, Shih-Chung Henry. 1997. On Taiwanese *Kam* Constructions. MA thesis, National Taiwan Normal University, Taipei.
- Soh, Hooi Ling. 2005. *Wh*-in-situ in Mandarin Chinese. *Linguistic Inquiry* 36.1:143–155. <https://doi.org/10.1162/ling.2005.36.1.143>
- Tang, Ting-Chi. 1981. Guoyu yiwenju de yanjiu [A study on Mandarin questions]. *Shida Xuebao [Journal of National Taiwan University]* 26:219–277.
- Tang, Ting-Chi. 1984. Guoyu yiwenju yanjiu xulun [A further study on Mandarin questions]. *Shida Xuebao* 29:381–437.
- Tang, Ting-Chi. 1994. On the semantics and syntax of negatives in Southern Min. *Studies on Chinese Morphology and Syntax* 5, 119–169. Taipei: Student Book Co., Ltd.
- Tang, Ting-Chi. 1998. Minnanyu de shifei wenju yu zhengfan wenju [Yes-no and V-not-V questions in Southern Min]. *Hanxue Yanjiu* 16.2:173–195.

- Tang, Ting-Chi. 1999. *Minnanyu Yufa Yanjiu Shilun* [Essays on Southern Min Grammar]. Taipei: Student Book Co., Ltd.
- Teng, Shou-Hsin. 1979. Remarks on cleft sentences in Chinese. *Journal of Chinese Linguistics* 7.1:101–114.
- Teng, Shou-Hsin. 1992. Diversification and unification of negation in Taiwanese. *Symposium Series of the Institute of History and Philology, Academia Sinica: Chinese Languages and Linguistics I*, 609–629. Taipei: Academia Sinica.
- Tsai, Wei-Tien Dylan. 1994. On Economizing the Theory of A-bar Dependencies. Doctoral dissertation, Massachusetts Institute of Technology, Cambridge.
- Tsai, Wei-Tien Dylan. 1999. On lexical courtesy. *Journal of East Asian Linguistics* 8:39–73. <https://doi.org/10.1023/A:1008354312243>
- Tsao, Feng-fu. 1998. On three aspect-related morphemes “U”, “Ø”, “A” in Taiwanese Minnan. *Tsing Hua Journal of Chinese Studies* 28.3:299–334.
- Wang, Pen-ying, and Chinfa Lien. 1995. Taiwan minnanyu zhong de fanfu wenju [A-not-A questions in Taiwan Southern Min]. Taiwan Minnanyu Lunwenji [Papers from the 1994 Conference on Language Teaching and Linguistics in Taiwan: Southern Min], ed. by Feng-fu Tsao and Mei-hui Tsai, 47–69. Taipei: The Crane Publishing.
- Wei, Pei-chuan. 2007. Cong foudingci dao yiwen zhuci [The pathway from negatives to question particles]. *Bulletin of Chinese Linguistics* 1.2:23–57. <https://doi.org/10.1163/2405478X-90000018>
- Wei, Pei-chuan. 2010. Shifou-V(N)P jushi de youlai [The history of the interrogative structure *shi fou*-V(N)P]. *Language and Linguistics* 11.2:335–392.
- Wu, Jiun-Shiung, and One-Soon Her. 2020. On the dichotomy of questions in Mandarin: A formal semantic account. Unpublished manuscript.
- Wu, Hofa Meng-Jung. 2016. The Syntax of Polar Questions and Their Answers in Taiwanese. Doctoral dissertation, Newcastle University, Newcastle.
- Xie, Zhiguo. 2013. Exhaustifying focus intervention effects: A crosslinguistic study. *Berkeley Linguistics Society* 39:317–332. <https://doi.org/10.3765/bls.v39i1.3889>
- Xu, Liejiong. 2013. Are A-not-A questions alternative questions or *wh*-questions? *Breaking Down the Barriers: Interdisciplinary Studies in Chinese Linguistics and Beyond*, ed. by Guangshun Cao, Hilary Chappell, Redouane Djamouri and Thekla Wiebusch, 305–319. Taipei: Institute of Linguistics, Academia Sinica.
- Yang, Barry Chung-Yu. 2008. Intervention Effects and the Covert Component of Grammar. Doctoral dissertation, National Tsing Hua University, Hsinchu.
- Yang, Barry Chung-Yu. 2012. Intervention effects and *wh*-construals. *Journal of East Asian Linguistics* 21:43–87. <https://doi.org/10.1007/s10831-011-9080-5>
- Yang, Xiu-fang. 1991. Taiwan Minnanyu Yufa Gao [A Draft for Taiwan Southern Min Grammar]. Taipei: Ta-an Press.
- Yue-Hashimoto, Anne O. 1991. Stratification in comparative dialectal grammar: A case in Southern Min. *Journal of Chinese Linguistics* 19.2:172–201.
- Zhu, Dexi. 1985. Hanyu fangyan-li de liang-zhong fanfu wenju [Two types of disjunctive questions in Sinitic languages]. *Zhongguo Yuwen* 184:10–20.
- Zhu, Dexi. 1991. V-neg-VO yu VO-neg-V liang-zhong fanfu wenju zai Hanyu fangyan-li de fenbu [The distribution of V-neg-VO and VO-neg-V questions in Chinese dialects]. *Zhongguo Yuwen* 224.5:321–332.

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