## Syntactic Analysis of -kah in Malay Polar Questions

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#### Abstract

This paper talks about the question particle -kah, that is commonly used in both constituent and polar questions in Malay. This particle is interesting because it can appear in different positions in polar questions. Despite previous research on the topic, there is a lack of comprehensive description and syntactic analysis of -kah in Malay polar questions. We found that -kah occupies four major syntactic positions: (i) after the sentence-initial verb/modal, (ii) after the sentence-initial phrase. (iii) after the entire sentence, and (iv) after the sentence-initial auxiliary ada. These different syntactic positions are attributable to three syntactic processes, i.e. head movement, phrasal movement and basegenerated ada. This paper suggests that the diverse syntactic positions can receive a unified account by assuming that -kah is a bound C head that requires phonological support like the -ed in English using any of the three syntactic mechanisms.

### **1** Overview

In Malay, the particle *-kah* is typically used in constituent questions and polar questions, as in (1) and (2) respectively. It has been commonly referred to as the question particle in the literature. While some studies on Malay constituent questions can be found, not much has been said about the particle *-kah* in Malay polar questions.

(1) Siapa-<u>kah</u> nama kamu? who-Q name you 'What is your name?' (2) Besar-<u>kah</u> rumah Ali? big-Q house Ali 'Is Ali's house big?'

At first glance, the distribution of particle *-kah* in polar questions appears to be somewhat arbitrary. As shown in (1) and (3b), *-kah* can show up after a word near the beginning of the polar question. In (3a), however, *-kah* occurs in the sentence-final position.

- (3) a. Ali pergi ke hospital-<u>kah</u>?
   Ali go to hospital
   'Did Ali go TO THE HOSPITAL?'
  - b. Pergi-<u>kah</u> Ali ke hospital? go-Q Ali to hospital 'Did Ali go to the hospital?'

Where can *-kah* occur in Malay polar questions? Are these instances of *-kah* related? In this paper, we attempt to answer these questions by addressing the strategies used in all types of Malay polar questions involving *-kah* and propose a unified analysis to account for the particle *-kah*. We show that a single economy principle is sufficient in capturing the large variety of options for polar question formation involving *-kah*.

The rest of the paper is structured as follows. In Section 2, we will present a short review of the literature related to Malay polar questions. We show that previous studies are still not comprehensive enough in the description of *kah* in Malay polar questions. In Section 3, we provide some of the facts in Malay to facilitate our discussion in the following sections and also briefly talk about the various types of Malay polar questions. Section 4 will propose a unified analysis in which multiple strategies can be used in Malay polar questions to support *-kah*. Finally, a summary of the whole paper will be included in Section 5.

# 2 Previous descriptions of Malay polar questions

Previous research on Malay polar questions is rather limited. They focus on describing the different types of polar questions in the language. Karim et al. (2008) have identified some of the patterns allowed in Malay polar question formation, i.e. SVO pattern with rising intonation at the end of the sentence<sup>1</sup> (4), SVO pattern with *-kah* appearing at the end of the sentence (5) and phrases/words appearing before *-kah* near the beginning of the sentence (6-7).

- (4) Kamal me-mandu lori?<sup>2</sup> Kamal ACT-drive lorry 'Does/Can Kamal drive a lorry?' (Karim et al., 2008, p.442)
- (5) Mereka berlepas pagi tadi-<u>kah</u>? they leave morni just.nowng Q 'Did they leave THIS MORNING?' (Karim et al., 2008, p.442)
- (6) Pagi tadi-<u>kah</u> mereka morning just.now-Q they berlepas? leave
  'Was it this morning that they left?' (Karim et al., 2008, p.443)
- (7) Cantik-<u>kah</u> istana raja itu? beautiful-Q palace king that 'Is that palace beautiful?' (Karim et al., 2008, p.443)

While the Karim et al.'s (2008) description of the different types of Malay polar questions serves as an important starting point for the study of Malay polar question formation, the syntactic analysis of the distribution pattern of *-kah* is lacking. Most importantly, they did not say why *-kah* in (5)—(7) can occupy different positions.

Fortin (2009) described three strategies for forming polar questions in Indonesian. As Malay and Indonesian are very close to each other, the study is useful to our understanding of Malay polar questions. The first strategy only involves question intonation (8); the second strategy involves a question particle, apa(kah) (9); and the third strategy involves a fronted constituent marked with -kah (10).

- (8) Siti sudah pulang?
   Siti TEMP go.home
   'Did Siti go home?'
   (Fortin, 2009, p.32)
- (9) Apa(<u>kah</u>) Siti sudah pulang? what(Q) Siti TEMP go.home
   'Did Siti go home?'

(Fortin, 2009, p.32)

(10) [Sudah pulang]+<u>kah</u> Siti? TEMP go.home]+Q Siti 'Did Siti ALREADY GO HOME?' (Fortin, 2009, p.32)

Fortin (2009) has proposed a unified analysis and argued that Indonesian questions are focus constructions as the particle *-kah*, which functions as a focus marker is present. Further evidence supporting this claim has been provided, including the similarities between *kah* and the non-interrogative focus marker *-lah* in Indonesian, as illustrated below.

(11)	a.	[Pintu	itu]+lah	*(yang)
		[door	that]+FOC	COMP
		Ali	(*mem-)buka.	
		Ali	(*ACT-)open	
		'It is that door that Ali opened.'		
			(Fortin, 2009	9, p.36)

b.	[Pintu	yang	mana]+ <u>kah</u>
	[door	COMP	which]+Q
	*(yang)	Ali	(*mem-)buka?
	COMP	Ali	(*ACT-)open
	'Which de	open?'	

Although this may seem like a desirable analysis, Fortin (2009) has noted that this analysis does not necessarily extend to Malay

<sup>&</sup>lt;sup>1</sup> This pattern will not be discussed in this paper as it is not associated with *-kah*.

<sup>&</sup>lt;sup>2</sup> All the examples cited from Karim et al. (2008) do not come with English translation. Whenever examples are

cited from Karim et al. (2008), English translation will be provided.

as both languages may differ in some respects. For one thing, there are some differences in the strategies used in polar question formation between the two languages. Besides, not much has been said about the distribution of *-kah*, in particular, in Malay polar questions. Therefore, this will be further discussed later in this paper.

# **3** On the basics of Malay polar questions

#### 3.1 Basic word order of Malay

As a starting point for the analysis of Malay polar question formation involving *-kah*, we will briefly talk about the basic word order of Malay. Malay is a head-initial language and has an SVO word order. As shown in (12a), the subject *Ali* is followed by the verb *membaca* and the verb is followed by the object *buku*. When a modal is present in the sentence, the modal will always precede the verb, as shown in (12b).

- (12) a. Ali mem-baca buku itu. Ali ACT-read book that 'Ali read that book.' (Karim et al., 2008, p.350)
  - b. Ali harus mem-baca buku Ali must ACT-read book itu. that 'Ali must read that book.'

## **3.2** Distribution of *-kah* in Malay polar questions

In this section, we will provide a preliminary sketch of the types of polar questions involving *-kah* in Malay. In general, there are four types of polar questions with *-kah* attached in Malay:

- 1) Type 1: polar question with *-kah* appearing after a verb (13b)/modal (14c)
- 2) Type 2a<sup>3</sup>: polar question with *-kah* appearing after a phrase (15b)

- 3) Type 2b: polar question with *-kah* appearing after an entire sentence with SVO word order (15c)
- 4) Type 3: polar question with *-kah* appearing after the auxiliary  $ada^4$  (16b)

**Type 1:** As shown in (13b), the verb *makan* appears before *-kah* and the subject *Ali*. This is different from the corresponding declarative sentence in (13a), where the verb normally appears after the subject. Note that this type of polar question is allowed in both formal and colloquial Malay.

- (13) a. Ali makan kek itu. Ali eat cake that 'Ali ate that cake.'
  - b. Makan-<u>kah</u> Ali kek itu? eat-Q Ali cake that 'Did Ali eat that cake?'

If a modal is present in the sentence, the verb can no longer be placed before *-kah*. As illustrated in (14b), moving the verb *makan* to a position before *-kah* will result in an ungrammatical sentence as the modal *boleh* 'can' is present in the sentence. Conversely, the modal *boleh* can appear before *-kah*, as shown in (14c).

- (14) a. Ali boleh makan kek itu. Ali can eat cake that 'Ali can eat that cake.'
  - b \*Makan-<u>kah</u> Ali boleh kek eat-Q Ali can cake itu? that 'Intended: Can Ali eat that cake?'
  - c. Boleh-<u>kah</u> Ali makan kek can-Q Ali eat cake itu? that 'Can Ali eat that cake?'

**Type 2a:** In (15b), it can be observed that the locative phrase *ke sekolah* can appear before *- kah*. Similar to Type 1 polar questions, Type

<sup>&</sup>lt;sup>3</sup> Note that 2 and 3 are labelled as Type 2a and 2b respectively as we will adopt an analysis that will collapse the two as one in the following section.

<sup>&</sup>lt;sup>4</sup> Not much has been said about *ada* in Malay grammar reference books. However, *ada* appearing in polar

questions behaves similarly like the dummy auxiliary *do* in English. Thus, we will refer *ada* as an auxiliary in this paper.

2a polar questions are commonly used in both formal and colloquial Malay.

**Type 2b:** As observed in (15c), *-kah* appears at the end of the whole sentence with SVO word order. It should be mentioned, however, this type of polar question is only allowed in colloquial Malay.

- (15) a. Dia ke sekolah. he/she to school 'He/She went to school.' (Karim et al., 2008, p.442)
  - b. Ke sekolah-<u>kah</u> dia? To school-Q he/she 'Was it to school that he/she went?' (Karim et al., 2008, p.443)
  - c. Dia ke sekolah-<u>kah</u>? he/she to school-Q 'Is he/she GOING TO SCHOOL?' (Karim et al., 2008, p.442)

**Type 3:** As illustrated in (16b), *-kah* appears after *ada* in this type of polar question. Note that for this type of polar question, *ada* is not found in the corresponding declarative sentence in (16a) but is inserted to the polar question. It resembles the insertion of dummy "do" in English polar questions.

- (16) a. Siti me-nelefon Ali semalam. Siti ACT-call Ali yesterday 'Siti called Ali yesterday.'
  - b. Ada-<u>kah</u> Siti me-nelefon Ali ada-Q Siti ACT-call Ali semalam? yesterday 'Did Siti call Ali yesterday?'

## **3.3** More on the responses to Malay polar questions

The polar questions in Malay are also known as *ayat tanya tertutup*, meaning closed questions (Karim et al., 2008). There are two possible ways of responding to polar questions in Malay, i.e. *ya* to indicate positive response (17b) and *bukan/tidak* to indicate negative response (17c) and (18b).

(17) a. Minum-<u>kah</u> Ali susu itu? drink-Q Ali milk that 'Did Ali drink that milk?'

- b. Ya, Ali minum susu itu. yes Ali drink milk that 'Yes, Ali drank that milk.'
- c. Tidak, Ali tidak minum no Ali no drink susu itu. milk that 'No, Ali didn't drink that milk.'
- (18) a. Ali- yang minum <u>kah</u> Ali-Q that drink susu itu? milk that 'Was it Ali who drank that milk?'
  - b. Bukan. yang minum susu that drink milk no itu bukan Ali. that no Ali 'No, it was not Ali who drank that milk.'

### 4 Unified analysis of -kah

Based on the examples provided in Section 3, it seems that particle -kah can appear in different positions in Malay polar questions. As far as we know, no prior work has been done to explain why -kah can occur in different positions in Malay polar questions. In this section, we will provide a unified analysis of -kah in Malay polar questions. Essentially, it is argued that *kah* is a bound suffix that must attach to a host element such as a word or a phrase. To justify this, we will begin by showing the different types of Malay polar questions mentioned in Section 3, in fact, are different strategies used to support -kah for phonological spellout. In general, three strategies have been identified to provide a host element for -kah in Malay polar questions:

- 1) head movement
- 2) phrasal movement
- 3) base-generated *ada*

### 4.1 Head movement

Verb movement in Malay polar questions As shown in (13b), it is possible for the verb to move to sentence-initial position when forming a polar question in Malay. However, this is only possible when the verb is fronted to combine with -kah. As shown in (19b), only the verb minum (but not the entire verb phrase minum air itu) is moved to sentence-initial position, while the rest of the phrase air itu remains in its original position. As only the V head is moved in Type 1 polar questions, we analyze this as a head movement. For such movement, we assume that minum which originates from the V position, moves to the T position and then moves from T to the C position, as shown in Figure 1. The movement is consistent with the Head Movement Constraint (HMC), which assumes that a head generally can only move upward to adjoin to the next c-commanding head (Travis, 1984). The analysis is similar to French, where the main verb is allowed to be moved to the front of the sentence (Freidin, 2012). In (20b), only the main verb moves to T, and then from T to C.

- (19) a. Siti minum air itu. Siti drink water that 'Siti drank that water.'
  - b. Minum-<u>kah</u> Siti air itu? drink-Q Siti water that 'Did Siti drink that water?'



Figure 1. Analysis of Verb Movement.

(20) a. Il embrasse souvent Marie. he kisses often Mary 'He often kisses Mary.' (Freidin, 2012, p.156) b. Embrasse-t-il souvent Marie? kisses he often Mary 'Does he often kiss Mary?' (Freidin, 2012, p.156)

Modal movement in Malay polar questions Further support for such an analysis comes from polar questions when a modal is present. The HMC requires that the verb must first move to C near sentence-initial position via T. However, if T is occupied, such an option becomes unavailable, which is borne out in (21c). Fronting the V head *pergi* will result in an ungrammatical sentence, as there is an intervening T head *mesti* between C and V. Instead, only the modal *mesti* which occupies the T head position can move up to combine *with -kah* as it occupies a higher position than *pergi*.

- (21) a. Ali mesti pergi ke sekolah. Ali must go to hospital 'Ali must go to the hospital.'
  - b. Mesti-<u>kah</u> Ali pergi ke must-Q Ali go to hospital? hospital
    'Must Ali go to the hospital?'
  - c. \*Pergi-<u>kah</u> Ali mesti ke go-Q Ali must to hospital? hospital
    'Intended: Must Ali go to the hospital?'

Based on the discussion above, we have shown that Type 1 polar questions are indeed the result of head movement.

### 4.2 Phrasal movement

The phrasal movement strategy is another way commonly used to support *-kah* in Malay polar questions. Based on the examples in (15), two types of phrasal movement can be identified in Malay polar questions, i.e.:

- 1) movement of a phrase to a position before *-kah*
- 2) movement of a whole sentence to a position before *-kah*

In (15b), the prepositional phrase *ke sekolah* is moved to the beginning of the sentence with the

particle *-kah* attached to it to form a polar question. The fact that only the PP *ke sekolah* 'to school' appears before *-kah* shows that *dia* is not moved and remains in its original position.

Although the particle *-kah* in (15c) would appear, at first glance, to be occupying the sentence-final position, we want to argue that, in fact *-kah* remains in its original C position. A plausible explanation for why the particle *-kah* would appear sentence-finally is that the whole sentence, say, TP *dia ke sekolah* is moved and placed before *-kah*, thus giving rise to the illusion that *-kah* moves to the end of the question.

### 4.3 *ada(kah)* insertion

The last strategy involved in supporting the kah in Malay polar questions is the insertion of ada to the sentence-initial position. As illustrated in (16), ada is added before -kah and followed by the original declarative sentence to give the sentence a question interpretation. Unlike the two strategies mentioned earlier, where the moved element originates from the sentence, ada does not originate from the corresponding declarative sentence. Similarly, this can be observed in English do-insertion (22). In English, as the main verb cannot move to the T head or C head to form a polar question, when there is no modal or auxiliary verb, the dummy auxiliary do is base-generated in T head to support the bound tense morpheme, and then moves to the C head in order to form a polar question in English (Han & Kroch, 2000).

- (22) a. \*Paint you?
  - b. Do you paint?

Following this line of thought, we argue that *adakah*-insertion has the same underlying mechanism as *do*-insertion. We propose that *ada* functions similarly as *do* and is base-generated to support *-kah*. However, it is unclear at this stage where *ada* is base-generated. It can potentially be base-generated in T head or C head. However, it seems possible for *ada* to base-generate in the C head.

# 4.4 How the different strategies can fit into the proposed analysis

Thus far, we have shown that the distribution of *-kah* in Malay polar questions is not arbitrary

and have identified the three strategies to support *-kah* in Malay polar questions. We will further show how our proposed analysis is capable of capturing all three strategies. As our proposed analysis is based on the assumption that *-kah* is a bound morpheme that must attach to a host element such as a word or a phrase, it is, therefore, required for something to appear before it. Malay uses any of the three strategies to achieve this. This is evident in the observations made earlier, where the fronted element or *ada* always appears to be adjacent to *-kah*. It should be noted that, however, it is not possible to apply more than one strategies simultaneously.

As *-kah* is known as the question particle, we would assume *-kah* to be occupying the C head with the Q feature. As a bound morpheme, *-kah* is required to attach to a host element in a way similar to the possessive 's in English. Therefore, the position before *-kah* must be filled. By examining the deep structure, we can tell the host element must either be a phrase in the Spec of CP or a head that is moved to C or base-generated at C.

In the case of head movement strategy, i.e. Type 1, we argue that the head (be it the T head or V head) will fill the C head position. If T is occupied by a modal, T will move to C instead of V since T has a higher position than V. As C is already occupied by *-kah*, we suggest that the V or T will form a complex C head with *-kah*. Such a movement serves to support *-kah*.

Similarly, we also argue that the phrasal movement in Malay polar questions, i.e. Type 2a and 2b, is motivated by the same reason. We propose that the element that has undergone fronting to be occupying the Spec of CP, as the fronted element is either a phrase or sentence, which is generally assumed to be moved to a phrasal position (Harizanov, 2019).

While the base-generated *ada* strategy is not the result of any syntactic movement, this strategy fits well into the analysis proposed here. In the case where neither head movement nor phrasal movement is involved, it is possible to base-generate *ada* in the C head to support *-kah*. This is not at all unusual as comparable mechanism is also found in English *do*-insertion, where the dummy auxiliary is base-generated at T. See

examples in (22). In Malay, *ada* will be basegenerated to support the particle *-kah*.

## 4.5 More on the semantic properties of Malay polar questions

Generally speaking, polar questions formed with head movement have a neutral reading, while polar questions with phrasal movement would receive a focus interpretation. Let us compare (13b) and (15b). As illustrated in (13b), the question remains neutral when only the verb is moved. In contrast, the fronted phrase ke sekolah is focus marked in (15b). Note that Malay polar questions that receive focus reading is semantically equivalent to English cleft construction it is...that ...?. In the same way, the polar question formed in (15c) also receives focus reading as it is also derived by phrasal movement. It is possible to analyze such a movement as phrasal movement if we argue that the entire sentence is moved to a position before -kah. It should be noted, however, the constituent that receives focus reading has to be the phrase that is placed closest to -kah. As shown in (15c), the phrase that is focus-marked is ke sekolah.

Similar to polar questions derived by the head movement strategy, Malay polar questions formed with *adakah* insertion are neutral. Adding *adakah* will only give the sentence a question interpretation, but not a focus reading.

### 5 Conclusion

In this paper, we have proposed a unified analysis of -kah in Malay polar questions. We have identified and examined the different strategies used in Malay polar questions, i.e. head movement, phrasal movement and ada(kah) insertion. It has been shown that all the three strategies point to the same requirement, i.e. to support the bound question particle -kah at the C head. That is to say something needs to be attached to *-kah* since the bound morpheme cannot stand alone. In the case of head movement and phrasal movement, we have proposed the different landing sites of the fronted element. We have also provided some cross-linguistics evidence to support our claim that ada is base-generated to support -kah similar to *do*-insertion in English.

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Abbreviations

ACT	active voice marker
COMP	complementizer
FOC	focus
Q	question particle/marker
TEMP	temporal marker