A Step into Khmer's Double Negation Mystery:

Clause-final Marker ទេ [te:] as Negative Polarity Focus

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Abstract

In Khmer, basic negation is formed using two negation elements: the preverbal marker មិន [mɨn] and the clause-final marker ទេ [te:]. However, there are cases where [te:] is optional with the utterance still retaining its negative meaning; when it is present, it is claimed that the utterance can have two readings: plain negation and emphatic negation (Saparova, 2020). Thus, there is speculation as to what function [te:] serves and what it contributes to the semantic meaning of a sentence. This thesis examines the optionality of [te:] through the lens of polarity focus, drawing on Wilder's (2013) and Goodhue's (2018, 2022) observations. It argues that the presence of [te:] depends on the salience of contrasting alternatives in the discourse context, which license polarity focus under the principle of maximize presupposition. When such antecedents are explicit, [te:] is required and emphasizes the truth of the negated proposition via polarity focus. In addition, this thesis finds that, unlike English, constituent focus marking in Khmer relies on polarity focus markers rather than prosodic prominence. It also identifies a connection between question markers and polarity focus markers: the clause-initial question marker តើ [taə] for positive polarity focus and the polar question marker ទេ [te:] for negative polarity focus.

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1. **Background**

1.1 **Khmer**

Khmer [kʰmae], the official language of Cambodia, belongs to the Mon-Khmer branch of the Austroasiatic family and is spoken by around 90% of the population, totaling approximately 14 million speakers (Bisang, 2014; Haiman, 2011; Saparova, 2020). Standard or Central Khmer, primarily spoken in the central region, is the most prominent dialect and serves as the main language of instruction in schools (Donley, 2020). This thesis focuses on Central Khmer though other noticeable dialects include Surin Khmer spoken in northeastern Thailand and Kiangkleang Khmer (also known as Khmer Krom [kʰmae kraom] by Cambodians and Kiengang Khmer by the Vietnamese) spoken in the "Mekong Delta region of Southern Vietnam" (Bisang, 2014; Haiman, 2011). Although still an understudied language, Khmer has a relatively extensive body of grammatical descriptions compared to other Austroasiatic languages (Bisang, 2014; Haiman, 2011). Sentences follow an SVO word order, and adjectives appear after nouns (Saparova, 2020). Serial verb constructions are also common (Saparova, 2020). Morphologically, Khmer is an isolating language, "preferring monosyllabic words to polysyllabic ones" (Donley, 2020) and has a rich history of derivational morphology via prefixes and infixes, but this process has since lost its productivity (Bisang, 2014; Saparova, 2020). While it shares many features with related languages such as Vietnamese, it also exhibits similarities with languages from completely different families, including Thai and Hmong, as part of the Southeast Asian Sprachbund (Haiman, 2011). Unlike most of its neighbors, however, Khmer is a non-tonal language that uses a "stress system based on loudness and pitch" where stress is placed on the major syllable in sesquisyllabic words (Bisang, 2014). In addition, due to a long history of Buddhism and broader

Indian influence, much of Khmer's vocabulary, as well as some aspects of its morphology, is borrowed from Sanskrit and Pali (Bisang, 2014).

1.2   Khmer Negation

In modern Khmer, the word for "no" is ទេ [te:], which can be paired with another word meaning "not" such as អត់ [ʔɑt] as seen below:

(1) (អត់)   ទេ!

(ʔɑt)   te:

(not)   no

"No!"   (Haiman, 2011, p. 225)

'Standard' negation defined as "negation in main declarative clauses" is formed via a double negative construction using one of four preverbal negation markers [mɨn, ʔɑt, pum, ʔət], which also precede preverbal TAM markers, followed by a clause-final negation marker [te:, sɑh, laəy, sɑh laəy] (Saparova, 2020).

One of the main differences between the preverbal markers is textual "style" (Bisang, 2014; Saparova, 2020). មិន [mɨn] is the "most stylistically neutral" and can be used in almost any context while អត់ [ʔɑt] is more prevalent in colloquial speech, ពុំ [pum] in written texts, and ពិតិ [ʔət] in archaic written texts (Saparova, 2020). មិន [mɨn] is also a relatively new marker with its form [mɑn] starting to replace the preverbal negator [pum] in the 17th century (Saparova, 2020).

As for the clause-final markers, they must appear together with preverbal markers to express negation. Their difference relates more to their semantic meanings. ទេ [te:] has the "most neutral semantics" while សោះ [sɑh], ឡើយ [laəy], and សោះឡើយ [sɑh laəy] are considered more emphatic negation markers, conveying meaning along the lines of "at all, in the

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least, completely" (Saparova, 2020). សោះ [sɑh] appears in both written and oral texts with historical meanings of "be exhausted, used up, all gone, out of" whereas ឡើយ [laəy] has historical meanings of 'to go on, to continue, to surpass' and mainly appears in literary written texts, especially in negative sentences "expressing the duration of the lack of action or state" (Saparova, 2020). សោះឡើយ [sɑh laəy], a combination of the two previous markers, mainly appears in literary texts and conveys the meaning of "nothing, absolutely nothing" (Saparova, 2020).

For this thesis, [mɨn] and [te:] were chosen for their stylistic neutrality and semantic neutrality respectively, forming a 'basic' negative construction in Khmer as exemplified below:

(2) ខ្ញុំ មិន ចេះ និយាយ ភាសាខ្មែរ (ទេ)

kʰɲom **mɨn** ceh niʔjiəj pʰiesa: kʰmae **(te:)**

I **NEG** know speak Khmer **NEG.FINAL**

"I don't speak Khmer." (based on Saparova, 2020, p. 5)

This example shows why the function of [te:] is often ambiguous in Khmer. There are cases such as this one in which [te:] can be omitted, but the sentence retains its negative meaning. However, when it is present as in (2) above, the sentence can either be interpreted plainly as "I don't speak Khmer" or emphatically as 'I don't speak Khmer at all' or 'No way, I don't speak Khmer!' (Saparova, 2020). The second reading can be made more salient with some tone-raising toward the end of the Khmer sentence. Regardless, it has been observed that [te:] adds a "certain emphatic effect" (Bisang, 2014) though there isn't a universal consensus on what that effect is; some such as Khin Sok cited in Saparova's paper claim that [te:] adds confidence and decisiveness to a statement (Saparova, 2020). Nevertheless, the observation that [te:] can induce multiple readings seems to contribute to the notion that it has neutral or ambiguous semantics.

However, as this thesis will later argue, this may not be the case if [te:] is a negative polarity focus marker since it would render every reading of negative sentences with [te:] to be emphatic.

It is also important to note that while this thesis focuses on basic or standard negation in Khmer, other forms of negation exist; one of which is caritive negative constructions, which convey the meaning of "absence" such as statements with the preposition 'without' or the suffix '-less' in English (Saparova, 2020). In Khmer, basic caritive negation is expressed by the word គ្មាន [kʰmiən], which consists of a negative prefix kʰ- that occurs only with the existential verb មាន [miən] 'to have' (Haiman, 2011; Saparova, 2020). For example:

(3) អាង   គ្មាន   ទឹក

ʔa:ŋ   **kʰ-miən**   tɨk

pool   **NEG-have**   water

"Swimming pool without water"   (based on Saparova, 2020, p. 20)

Prohibitive constructions or "negative imperatives" are facilitated by the auxiliary marker [kom] as seen below:

(4) កុំ   ដេក   នៅ   បន្ទប់   នេះ

kom   de:k   nəw   bɒntʊəp   nih

PROH sleep   be_situated room   this

"Don't sleep in this room."   (Saparova, 2020, p. 22)

In addition, "metalinguistic negation" in Khmer can be expressed by the "clause-final negative" ឯណា [aena:] 'where,' which differs from clause-final markers [te:, sɑh, laəy, sɑh laəy] in that it is rarely used in a "redundant or pleonastic" negative construction and can occur alone without a preverbal negator though often with the verb មាន [miən] 'to have' (Haiman, 2011). It usually

expresses scornful negation or meaning along the lines of "no way…" "fat chance!" or 'in what world would…" For example:

(5) ខ្ញុំ មាន លុយ ឯណា

k^{h}ɲom miən luj **aena:**

I have money **where**

'I have money? Fat chance!' (based on Haiman, 2011, p. 230)

These cases will not be considered.

1.3 Polarity Focus

The case of [te:] in Khmer is comparable to that of emphatic 'do' in English. Consider the following example:

(6) a. I write letters.

b. I **DO** write letters.

c. ?? I do write letters.

Here, similar to how [te:] behaves in negative Khmer sentences, 'do' is optional and doesn't add any additional truth conditions to the statement. In other words, (6a) and (6b) still have the same essential meaning. However, there is a difference in the sense that (6a) is a "neutral assertion" (under "normal intonation") while (6b) is an emphatic one (Wilder, 2013). (6c), on the other hand, is ungrammatical in "contemporary standard English," especially since (6a) is already possible and the auxiliary 'do' is always "prosodically prominent" in emphatic 'do' sentences (Wilder, 2013).

The emphasis shown in (6b) is known as "polarity focus," which is a type of focus feature in semantics often attributed to emphasizing the truth value of a statement (hence, its other name "verum focus" though some scholars consider the two as being distinct from one

another) (Goodhue, 2018). Polarity focus in positive or affirmative sentences such as (6b) is known as 'positive polarity focus,' which, in this case, is facilitated by the auxiliary 'do,' making it a positive polarity focus marker. On the other hand, if we assume [te:] to be a negative polarity focus marker, a negative sentence such as (2) in Khmer shows 'negative polarity focus.'

According to Wilder (2013) and Goodhue (2018), polarity focus can't be used "out of the blue;" it requires either *?p* or *¬p* as salient "antecedents"[1] in the discourse context. In other words, for polarity focus to be licensed in an utterance (*p*), there needs to be a polar question (*?p*) or a proposition with contrasting polarity (*¬p*) that is previously given in the context and is somehow salient to the speaker. Consider the following example:

(7) A is looking through the groceries B just bought. Here are four possible conversations:

    a. A: Did you buy yogurt?

       B: I **DID** buy yogurt.

    b. A: You didn't buy yogurt.

       B: (No,) I **DID** buy yogurt.

    c. (i) B: # I **DID** buy yogurt.

       (ii) B: I bought **YOGURT**.

    d. A: You bought sour cream.

       (i) B: # (No,) I **DID** buy yogurt.

       (ii) B: (No,) I bought **YOGURT**.   (Goodhue, 2022, p. 119)

Here, we see that polarity focus is licensed by the polar question antecedent in (7a) and the (negative) contrasting alternative in (7b). On the other hand, (7c-i) shows that polarity focus can't be used out of the blue; in such a case, focus marking on the object is preferred as in (7c-ii)

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[1] This thesis uses the term "antecedents" originally referenced in Goodhue's 2018 paper, but it is worth noting that he later adopts Büring's "focal target" in his 2022 revised version.

(Goodhue, 2022). (7d) further illustrates the concept of "antecedents" in this context. (7d-i) is infelicitous because polarity focus is being used in reference to propositional content that was not given in the discourse context, specifically by A's utterance "You bought sour cream;" focus marking on the object is preferred as shown in (7d-ii).

Based on this, we can also imagine a context in which the speaker in (6b) responds to a polar question such as 'Do you write letters?' or takes a contrasting proposition such as 'Everyone thinks I don't write letters' as salient to them, thus giving them license to use polarity focus in '(but) I **DO** write letters.'

1.4   Presuppositions

Polarity focus, and focus more broadly, also interacts with presuppositions, which are assumptions that are "taken for granted in a discourse context" (Francis, 2019). Consider (8) below:

(8) Mayura's rabbit is brown.

When this is uttered, the hearer assumes that the speaker in (8) takes for granted that Mayura has a rabbit and is "presenting as new information" that that rabbit that belongs to Mayura is brown (Francis, 2019). Therefore, 'Mayura has a rabbit' is a presupposition of 'Mayura's rabbit is brown.' When it comes to focus marking as denoted by ([ ]$_F$) in (9), presuppositions are introduced in the form of "a set of alternatives to [the] constituents that bear [focus]" (Francis, 2019). Consider (9) below:

(9) a. Who ate the apple?

b. **[SAM]$_F$** ate the apple.   (Francis, 2019, p. 13)

For question-answer congruency, focus marking is placed on the constituent "Sam." This then introduces focus presuppositions as a set of propositions of the form 'x ate the apple' with

different substitutions for the focus-marked constituent (in this case, "Sam") such as "Alex ate the apple," 'Kosal ate the apple,' and so on (Francis, 2019). In other words, it presupposes that someone ate the apple. These substitutions fit into Schlenker's (2012) definition of "presuppositional alternatives":

(10) *Presuppositional alternatives*

The presuppositional alternatives of a clause *F* are all the clauses obtained by replacing one or more items in *F* with their lexical alternatives.

Alt(F) = {F': F' is obtained from F by replacing one or several lexical items in F with some of their alternatives} (Schlenker, 2012, p. 392)

In terms of polarity focus, a polarity-focused-utterance *p* presupposes that there are alternatives to *p* that are of the same semantic type but are "semantically distinct from [the] ordinary semantic value" of *p* (Goodhue, 2018). For instance, in (7b), B's utterance "I **DID** buy yogurt" (*p*) presupposes that there are focus alternatives to *p*, which include $\neg p$ ('that I didn't buy yogurt').

1.5 Principle of Maximize Presupposition

These focus presuppositions are relevant to polarity focus when we consider Heim's (1991) principle of maximize presupposition as stated below:

(11) *Maximize presupposition*:

If a sentence *S* is a presuppositional alternative of a sentence *S'* and the context *c* is such that

(i) the presuppositions of *S* and *S'* are satisfied within *c*;

(ii) *S* and *S'* are truth-conditionally equivalent relative to *c*;

(iii) *S* carries a stronger presupposition than *S'*,

then *S* should be preferred to *S'*.   (Goodhue, 2018, p. 19; Schlenker, 2012, p. 393)

In other words, when two utterances have the same truth conditions, the utterance with the stronger presupposition is preferred as long as the presupposition is met, partly because it adds more information to the shared knowledge between the speaker and hearer.

Based on this, if a focus-marked utterance is truth-conditionally equivalent to a non-focus-marked one, the focus-marked utterance is preferred because it carries a stronger (focus) presupposition (Goodhue, 2018). This is why (6b), which has polarity focus, is preferred to (6c), which has no focus marking. Recall example (6) below:

(6)   a. I write letters.

        b. I **DO** write letters.

        c. ?? I do write letters.

However, Goodhue (2018, 2022) notices that there are cases in which polarity focus is optional, namely in "response[s] to overt polar questions" such as (12) below:

(12)   A: Did Ivy submit her paper yesterday?

      a. B: (Yes,) She **DID** submit her paper.

      b. B: (Yes,) She submitted her paper.   (based on Goodhue, 2022, p. 121)

Here, both the focus-marked utterance (12a) and the non-focused utterance (12b) are acceptable despite having the same truth conditions, which seems to go against the principle of maximize presupposition.

In explaining this, Goodhue (2018) mentions that focus marking in general is optional when the "context provides multiple possible antecedents to choose from." Consider the example on the following page:

(13) A: Yesterday, Jolene and Dolly pitched the tent. What happened today?

   a. B: **JOLENE** pitched the tent.

   b. B: Jolene pitched the tent.   (Goodhue, 2022, p. 125)

In (13a), B sees their utterance as contrasting with A's "antecedent utterance" in the subject position (either because 'Jolene' contrasts with 'Dolly' or the entire conjunction 'Jolene and Dolly'), leading them to use focus marking (Goodhue, 2018, 2022). However, if B doesn't take their utterance as contrasting with A's, then they would use "default prominence" or "broad focus," which is when the "whole utterance is presented as new information" as seen in (13b) (Goodhue, 2022; Sityaev & House, 2003).

   The same can also be applied to polar questions. Since polar questions "denote the set of their answers {p, ¬p}," both p and $¬p$ are made salient as antecedents for focus marking (Goodhue, 2018). If the speaker takes p to be contextually salient and they assert p, they use broad focus such as in (12b) (Goodhue, 2018). However, if the speaker sees $¬p$ as salient, they use polarity focus to draw "narrow focus" to a part of the utterance containing new information as seen in (12a) (Goodhue, 2018; Sityaev & House, 2003). In this case, B sees an antecedent proposition 'that Ivy didn't submit her paper' as salient, which they contrast with the statement "She **DID** submit her paper."

   These cases are different from contexts that make a specific antecedent, specifically an alternative proposition with contrasting polarity, explicitly salient, which makes polarity focus strongly preferred. For example:

   (14) A: Rithisak doesn't like Mealea.

   a. B: He **DOES** like Mealea.

   b. B: ?? He likes Mealea.

Here, we see that a proposition with contrasting (negative) polarity is made salient by A's utterance, thus requiring B to use (positive) polarity focus via the principle of maximize presupposition in (14a) as opposed to broad focus in (14b).

2. <u>Investigation</u>

2.1 Setting Up the Question

The idea that the optionality of polarity focus may be caused by the fact that there are multiple possible antecedents in the context for the speaker to choose from is an intriguing one, one worth extending to Khmer to see if the optionality of clause-final negation marker [te:] can also be explained by this phenomenon. The presence of two readings (plain and emphatic) negation in sentences with [te:] also suggests some relation to broad focus and polarity focus respectively. Although English relies on an auxiliary verb such as 'have' for focus marking (and optional 'do' or 'don't' when none is present) according to Wilder (2013), I believe that Khmer uses focus markers, especially for polarity focus. In the case of negation, in the same way that 'do' is used for positive polarity focus in English, [te:] is used for negative polarity focus in Khmer. There is reason to believe that [te:] is a negative polarity focus marker rather than [mɨn] because while [te:] can often be optional, [mɨn] is always needed to maintain a negative construction. Therefore, it would be interesting to explore how [te:] fares as a polarity focus marker since it has to be licensed by a salient antecedent, which can either be a polar question or an alternative proposition with contrasting polarity.

2.2 Looking at Polar Questions

We can start by investigating polar questions. Consider example (2) again:

(2)   ខ្ញុំ   មិន   ចេះ   និយាយ   ភាសាខ្មែរ **(ទេ)**

        kʰɲom   **mɨn**   ceh   niʔjiəj   pʰiesa: kʰmae   **(te:)**

        I   **NEG**   know   speak   Khmer   **NEG.FINAL**

        "I don't speak Khmer"   (based on Saparova, 2020, p. 5)

Both the sentences with and without [te:] have the same truth conditions. However, based on my intuition as a native Khmer speaker, the sentence without [te:] seems to use broad focus as the entire utterance is presented as new information. In other words, the hearer's attention is not particularly drawn to a specific part of the utterance. On the other hand, [te:] adds a certain kind of emphasis that makes the utterance feel as if it was a response to a question, which seems to align with some claims that it adds confidence or decisiveness to a statement. Considering that [te:] can't be licensed without a salient antecedent if it is a polarity focus marker, this leads me to believe that the speaker in (1) perceives an implicit polar question to be the salient antecedent licensing their use of [te:]. We can then investigate a case in which [te:] is used in response to a polar question:

(15)   A: តើ   អ្នក   ចេះ   និយាយ   ភាសាខ្មែរ ទេ?

             taə neək ceh   niʔjiəj   pʰiesa: kʰmae   te:

             Q   you   know   speak   Khmer   polar question marker

             'Do you speak Khmer?'

       B: (អត់ទេ) ខ្ញុំ   មិន   ចេះ   និយាយ   ភាសាខ្មែរ *(ទេ)

             (ɑt te:)   kʰɲom **mɨn**   ceh   niʔjiəj   pʰiesa: kʰmae   ***(te:)**

             no   I   **NEG**   know   speak   Khmer   **NEG.FINAL**

             '(No,) I don't speak Khmer.'

Here, there is an interesting observation. When responding to a polar question, [te:] is no longer optional but actually required in an utterance. Although this aligns with one of the contexts in which polarity focus is licensed, it contradicts Goodhue's notion that polarity focus is optional in response to overt polar questions; in fact, it seems to be the case that [te:] is required in all negative responses to polar questions. This can perhaps be explained by the unique nature of [te:] in Khmer as it is not only a clause-final negation marker but also a polar question marker as seen in A's utterance in (15) and arguably contributes an additional meaning of 'or not' to polar questions. Support for this comes from the full version of the polar question in (15):

(16)   តើ   អ្នក   ចេះ   និយាយ   ភាសាខ្មែរ   (ឬ)   ទេ?

        taə   neək   ceh   niʔjiəj   pʰiesa:kʰmae   (rɨː)   te:

        Q   you   know   speak   Khmer   (or)   polar question marker

        'Do you speak Khmer (or not)?'

In Khmer, the full version of a polar question contains the disjunctive conjunction ឬ [rɨː] 'or' and the polar question marker ទេ [te:] though it is often shortened to just [te:] and both questions have the same meaning (Saparova, 2020). Thus, even without [rɨː], every polar question retains an implicit 'or not' meaning. This is relevant when we consider Goodhue's observation that responses to 'or not' questions increase preference for polarity focus as opposed to regular polar questions. For example:

(17)   A: Does Kaiwen like cucumbers or not?

        a. B: He **DOES** like cucumbers.

        b. B: ?? He likes cucumbers.

Here, although both responses have the same truth conditions, B's utterance with polarity focus (17a) is preferred because A's 'or not' question makes $\neg p$ more salient as an antecedent. Once it

is "taken for granted that the $\neg p$ antecedent is available," the principle of maximize presupposition creates the necessary pressure for focus marking (Goodhue, 2018). Although Goodhue only included examples of positive answers to 'or not' questions in his paper, I believe that negative answers work in a similar way:

(18)   A: Does Kaiwen like cucumbers or not?

     a.   B: He **DOESN'T** like cucumbers.

     b.   B: ?? He doesn't like cucumbers.

From this, we see that a response with negative polarity focus (18a) is preferred to one with broad focus (18b), meaning that the principle of maximize presupposition still applies. However, the salient $\neg p$ antecedent is different. In (17), the speaker takes 'that Kaiwen doesn't like cucumbers' to be contextually salient, licensing their use of positive polarity focus. However, in (18), the $\neg p$ antecedent is 'that Kaiwen likes cucumbers,' which licenses the negative polarity focus in (18a).

     Therefore, 'or not' questions make $\neg p$ more salient, which could either be a proposition with negative polarity or positive polarity, and the speaker responds with an utterance that has contrasting polarity depending on what is salient to them. In Khmer then, because every polar question is an implicit 'or not' question, polarity focus is always preferred, which explains the requirement of [te:] in B's response to the polar question in (15) stated again on the following page:

(15) A: គើ អ្នក ចេះ និយាយ ភាសាខ្មែរ ទេ?

taə neək ceh niʔjiəj pʰiesa: kʰmae te:

Q you know speak Khmer polar question marker

'Do you speak Khmer?'

B: (អត់ទេ) ខ្ញុំ មិន ចេះ និយាយ ភាសាខ្មែរ *(ទេ)

(ɑt te:) kʰɲom **min** ceh niʔjiəj pʰiesa: kʰmae ***(te:)**

no I **NEG** know speak Khmer **NEG.FINAL**

'(No,) I don't speak Khmer'

This also suggests that negative polarity focus in Khmer is licensed by only one type of antecedent: an alternative proposition with contrasting polarity, which aligns with Goodhue (2022) claim that "all focus marking [including polarity focus] requires true contrast." Goodhue further observes that, unlike positive answers to polar questions, negative answers always prefer polarity focus, even when it's not in response to an 'or not' question. Recall the polar question and its positive answer in (12) and consider (19) with its negative counterpart:

(12)   A: Did Ivy submit her paper yesterday?

    a. B: (Yes,) She **DID** submit her paper.

    b. B: (Yes,) She submitted her paper.   (based on Goodhue, 2022, p. 121)

(19)   A: Did Ivy submit her paper yesterday?

    a. B: (No,) She **DIDN'T** submit her paper.

    b. B: ?? (No,) She didn't submit her paper.   (Goodhue, 2022, p. 122)

We see that in (12), both the positive polarity focus response (12a) and broad focus response (12b) are acceptable. However, in (19), the response with negative polarity focus (19a) is

strongly preferred to the broad focus one (19b). This shows that negative polarity focus operates similarly in negative answers to polar questions in both English and Khmer.

2.3   Looking at Different Types of Statements

Now that we've established that [te:] is required in all negative responses to polar questions in Khmer, we can go back to investigate the case of [te:] in a negative statement uttered by itself (not in response to a polar question):

(20)　ខ្ញុំ　　មិន　ចូលចិត្ត　ញ៉ាំ　យ៉ាអួ　(ទេ)

　　　　kʰɲom　**min**　co:lcət　ɲam　jaw ua　**(te:)**

　　　　I　　　**NEG**　like　　eat　　yogurt　**NEG.FINAL**

　　　　'I don't like to eat yogurt.'

Both the utterances with and without [te:] have the same truth conditions. However, if [te:] is a negative polarity focus marker, it would be reasonable to assume that the principle of maximize presupposition would make the focus-marked utterance (with [te:]) more preferable to a non-focus-marked one (without [te:]) in the right contexts since the former has a stronger presupposition. This can be explained by the fact that there are multiple possible antecedents in the context that the speaker can take as salient and the specific one that would force polarity focus marking is not explicit. For instance, in (20), we can imagine a context in which the speaker is responding to a question such as 'What is one fact about yourself?' In this case, the speaker would present their whole statement as new information, leading to broad focus and therefore no [te:] marking (Sityaev & House, 2003). For [te:] to be used, the speaker would have to situate their response in a context in which there is a salient polar question, or rather, as established in §2.2, a "salient alternative with contrasting polarity" (Goodhue, 2018). An example context is shown on the following page:

(21) (មនុស្ស គ្រប់ គ្នា ចូលចិត្ត ញ៉ាំ យ៉ោអ៊ូ តែ)

mɔnuh krup kʰnia co:lcət ɲam jaw ua tae

human all together like eat yogurt but

('Everyone likes to eat yogurt, but…')

ខ្ញុំ   មិន ចូលចិត្ត ញ៉ាំ យ៉ោអ៊ូ *(ទេ)

kʰɲom **mɨn** co:lcət ɲam jaw ua ***(te:)**

I **NEG** like eat yogurt **NEG.FINAL**

'I don't like to eat yogurt.'

Here, once the speaker perceives a $\neg p$ antecedent such as 'that everyone likes to eat yogurt' to be salient to them, they can use polarity focus to contrast it with their assertion, which is preferred via the principle of maximize presupposition.

All this suggests that [te:] is optional because there is not an explicitly salient antecedent specific to polarity focus, namely an alternative proposition with contrasting polarity, in the discourse context that would require the presence of [te:] as a negative polarity focus marker. This is still in line with observations in focus literature that multiple possible antecedents lead to optional focus marking (Goodhue, 2018).

To provide further support for [te:] being a negative polarity focus marker, a context with an explicit contrasting alternative (not just what the speaker takes to be salient to them) should be explored):

(22) A: នារី ថា សាន បាន ទៅ ផ្សារ

   niəri: tʰa: sa:n   ɓa:n   tɨw   pʰsa:

   Neary   say   Saan   PST   go   market

   'Neary said that Saan went to the market.'

  B: (អត់ទេ) សាន មិន បាន ទៅ ផ្សារ *(ទេ)

   (ɑt te:)   sa:n   **mɨn**   ɓa:n   tɨw   pʰsa: ***(te:)**

   no   Saan   **NEG**   PST   go   market   **NEG.FINAL**

   '(No,) Saan didn't go to the market.'

As seen here, 'Saan went to the market' is explicitly stated as part of A's utterance, providing a proposition with contrasting polarity that licenses and requires the use of [te:] in B's response.

2.4 Constituent Focus Marking and Polarity Focus in Khmer

There are even more interesting observations about polarity focus in Khmer when we consider contexts involving constituent focus marking. Consider the following example in English:

(23) A: I heard that you went to Thailand.

   B: I didn't go to **THAILAND**. I went to **JAPAN**.

Here, B uses focus marking on the constituents 'Thailand' and 'Japan' to correct the presupposition and assumption in A's utterance that B went to Thailand. I believe that constituent focus marking is a little different in Khmer mainly because it doesn't use "prosodic prominence" as mentioned in Goodhue's (2022) paper but rather polarity focus markers. Consider the same example in Khmer:

(24) A: ខ្ញុំ ឮ ថា អ្នក បាន ទៅ ថៃ ។[2]

k^{h}ɲom lɨː t^{h}aː neək ɓaːn tɨw t^{h}aj

I hear COMP you PST go Thailand

'I heard that you went to Thailand.'

B: (អត់ទេ) ខ្ញុំ មិន បាន ទៅ ថៃ *(ទេ)។ ខ្ញុំ ទៅ ជប៉ុន *(គឺ)។

(ɑt teː) k^{h}ɲom **mɨn** ɓaːn tɨw t^{h}aj ***(teː)** k^{h}ɲom tɨw cəpon ***(taə)**

no I **NEG** PST go Thailand ***NEG.FINAL** I go Japan **POS**

'(No,) I didn't go to Thailand. I went to Japan.'

In the same scenario in Khmer, B corrects A's assumption regarding their travel destination, but instead of prosodic prominence on specific constituents, polarity focus is used. From this, multiple observations can be made: (1) it seems that constituent focus marking in Khmer, at least in this context, is facilitated by the use of both negative and positive polarity focus markers; (2) the word being used to mark positive polarity focus is គឺ [taə], which is usually a clause-initial question marker (Haiman, 2011), while ទេ [teː], a polar question marker, is functioning as a negative polarity focus marker[3], suggesting some connection between question markers and polarity focus markers in Khmer; (3) polarity focus is required for constituent focus marking. This is especially relevant in our investigation of [teː]. While the case of [taə] and positive polarity focus, in general, leaves much to be explored in future research, the requirement of [teː] in this context makes sense. There is a $\neg p$ antecedent ('that B went to Thailand'), which is made salient by A's utterance, thus requiring B to use polarity focus (via the principle of maximize

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[2] "។" is the equivalent of a full stop in Khmer.
[3] The clause-final negative ឯណា [aenaː] 'where,' which is indicative of metalinguistic negation, can also be used in combination with the existential verb មាន [miən] 'to have' for negative polarity focus in this context. However, intuitively, it conveys a more casual and even friendly tone.

presupposition) in contradicting that proposition. Example (25) shows another context in which polarity focus markers are used for constituent focus marking:

(25) A: នាង   បាន ទិញ ឡាន ពណ៌ ស។

      niəŋ   ɓa:n tɲ   la:n   pɔə   sɔ:

      3SG.F PST   buy   car   color white

      'She bought a white car.''

B: (អត់ទេ) នាង មិន   បាន ទិញ ឡាន ពណ៌ ស *(ទេ)។

      (ɑt te:) niəŋ **mɨn** ɓa:n tɲ   la:n pɔə   sɔ: ***(te:)**

      no   3SG.F **NEG** PST   buy   car   color white **NEG.FINAL**

      'She didn't buy a **WHITE** car…'

នាង ទិញ ឡាន ពណ៌ ក្រហម *(គឺ)។

      niəŋ   tɲ   la:n   pɔə   krɑha:m ***(taə)**

      3SG.F buy   car   color red   **POS**

      'She bought a **RED** car.'　　　　　　　(based on Goodhue, 2022, p. 126)

In this case, B uses negative and positive polarity focus (facilitated by markers [te:] and [taə] respectively) to contradict A's assertion that the car bought by the person referenced in (25) was white. All these observations, especially ones around the use of [te:] to directly contradict a salient proposition given in the context, provide great reason to believe that [te:] functions as a negative polarity focus marker in Khmer.

2.5   Explaining the Emphatic Effect of [te:]

2.5.1   Jespersen's Cycle

Saparova (2020) describes the double negative construction in Khmer in relation to Jespersen's Cycle. Originally formulated by Otto Jespersen, Jespersen's Cycle describes the development of negation in some languages through 3 stages:

(26)   <u>Stage 1</u>: Negation is expressed by a prepositional element.

<u>Stage 2</u>: Both preverbal and postverbal elements express negation (discontinuous expression)

<u>Stage 3</u>: Postverbal expression of negation or prepositional marker becomes optional.

(Saparova, 2020, p. 26)

French is a famous example as Old French (the first stage) only had the "prepositional negator *ne*," but over time, it gained the "postpositional marker *pas*" from the noun for "step." Now, in the final stage, the prepositional marker is optional or not used at all (in colloquial speech) (Saparova, 2020) as seen below:

(27)   **<u>Stage 1</u> (Old French)**:   Je   **ne**   parle   Français

<u>Stage 2</u> (Middle French):   Je   **ne**   parle   **pas**   Français

<u>Stage 3</u> (Modern colloquial French): Je   parle   **pas**   Français

 I   **NEG**   speak   **NEG**   French

"I don't speak French."

(based on Saparova, 2020, p. 26)

This pattern is also observed in Khmer as negation in Old Khmer was expressed without the clause-final marker [te:] and modern Khmer may be in the second stage of Jespersen's Cycle with the presence of both preverbal and postverbal negation elements. In addition, there is an

observation that "all clause-final negators were first emphatic forms," which may explain why [te:] can have an emphatic reading (Saparova, 2020). Although Jespersen's Cycle remains relevant for examining Khmer's double negation and Saparova partially applies this framework to explain the emphatic effect of [te:], this thesis seeks to explore [te:]'s emphasis from a different perspective: its function as a negative polarity focus marker.

2.5.2 The Emphatic Effect of Polarity Focus

There have been claims that statements with polarity focus evoke the intuition that the speaker emphasizes the truth of their proposition (Goodhue, 2022). Goodhue attempts to explain this by claiming that a polarity-focused assertion of p doesn't just contradict the opposing polarity alternative $\neg p$; it also claims its falsity, leading to the pragmatic effect that the truth of p is emphasized. He gives the following example:

(28)   A: Are you happy?

    a.   B: I **AM** happy.

        ↝ B emphasizes the truth of the proposition *that B is happy.*

    b.   B: I'm happy.

        ↝̸ B emphasizes the truth of the proposition *that B is happy.*

(Goodhue, 2022, p. 145)

Here, we see that the only difference between (28a) and (28b) is polarity focus. However, according to Goodhue, "information structural packaging impacts meaning." Both (28a) and (28b) references $\neg p$ ('that I'm not happy'), but unlike (28b), the focus structure in (28a) explicitly rejects the contrasting alternative, pragmatically emphasizing the truth of p. This emphasis also applies to general focus marking such as in (29) on the following page:

(29) A and B are arguing about whether Dinah or Moira likes Ivy more.

    a. B: Moira likes Ivy more.

    b. B: **DINAH** likes Ivy more.

    ↝ B emphasizes the truth of the proposition *that Dinah likes Ivy more.*

<div align="right">(Goodhue, 2018, p. 146)</div>

All that is needed for truth emphasis is "one utterance entail[ing] the falsity of a contrasting alternative" (Goodhue, 2022). In this case, B's focus-marked utterance entails that the only other salient alternative ('that Moira likes Ivy more') is false, thus emphasizing the truth of their propositional content.

This reasoning can then be extended to explain the emphatic effect of [te:] in Khmer. If [te:] is a negative polarity focus marker, then whenever it is present in an utterance, it has the pragmatic effect of emphasizing the truth of the proposition. This is because it contradicts a $\neg p$ antecedent proposition salient in the context and entails its falsity. On the other hand, an utterance without [te:] uses broad focus, which lacks the polarity focus structure required for an emphatic effect. In other words, a negative sentence with [te:] always has an emphatic effect.

3. <u>Conclusion</u>

3.1 **Key Takeaways**

This thesis attempts to explain the optionality of clause-final negation marker ទេ [te:] in negative Khmer sentences through the lens of polarity focus. In English, it is observed that polarity focus is licensed in two contexts: polar questions (*?p*) and alternative propositions with contrasting polarity ($\neg p$) (Goodhue, 2018; Wilder, 2013). However, because every polar question in Khmer is inherently an implicit 'or not' question, contrasting alternatives are the primary discourse antecedents for negative polarity focus. [te:] is only optional when these specific

antecedents are not explicitly salient to the speaker in the context. When they are salient, [te:] is required for polarity focus via the principle of maximize presupposition and always has an emphatic effect in negative sentences. This emphasis is attributed to the pragmatic effect of polarity focus. An utterance with polarity focus not only references its contrasting alternative proposition but also explicitly rejects it through its focus structure, thereby emphasizing the truth of the propositional content. This thesis has also found that constituent focus marking in Khmer (limited to the contexts investigated) operates through the use of both negative and positive polarity focus markers instead of prosodic prominence as seen in English. Additionally, there appears to be a connection between question markers and polarity focus markers in Khmer: the clause-initial question marker តើ [taə] is used for positive polarity focus, while ទេ [te:], which is also a polar question marker, is used for negative polarity focus.

3.2   Limitations & Future Implications

This thesis takes a semantic approach to investigate the phenomenon of clause-final negation marker [te:] in Khmer, but there is much to be discovered through a joint syntactic approach. For instance, in more complex constructions such as conditionals with both a negative dependent clause and a negative independent clause, [te:] is observed to be optional in the dependent clause but always required in the independent clause (Saparova, 2020). Some have claimed that [te:] is needed to "close[] the conditional structure" (Saparova, 2020), but it would be interesting to investigate this in relation to negative polarity focus since it raises the question of why negative polarity focus would be applied differently in the same statement. In terms of grammaticality judgments, I mostly relied on my own intuitions as a native speaker of Central Khmer, but future research can look into surveys of other native speakers for comparison and better generalizations.

Regardless, the discovery that [te:] could be functioning as a negative polarity focus marker raises many exciting questions, especially since currently, there is little to no literature on the semantics of focus marking in Khmer, though this thesis found some support for the use of additional focus markers. One key question involves the role of [te:] in relation to the other clause-final negation markers [sɑh, laəy, sɑh laəy] since they are traditionally viewed as emphatic markers. In addition, while this thesis provides an alternative approach to explaining the emphatic effect of [te:], Jespersen's Cycle remains a relevant pattern of negation development observed in many languages and should be further explored in Khmer. The field of semantics is still an undiscovered ocean in Khmer, but it is my hope that this thesis inspires a yearning to set sail.

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