# Volitivity and Subject Case Marking in Sinhala

# Chao-Ting Chou and Sujeewa Hettiarachchi

#### 1. Introduction

Sinhala, an Indo-Aryan language spoken in Sri Lanka, has a well-known semantic classification of verbs. All Sinhala verb roots occur in one or two stem classes, commonly known as *volitives* and *involitives* (see Gair 1990; Gair & Paolillo 1997; Inman 1993; Beavers & Zubair 2010, 2013). The (in)volitivity of a verb denotes the extent to which the external argument is involved in the action denoted by the verb. For example, in (1a), the verb *natənəwa* 'dance', in the volitive form, is both volitional and intentional on the part of the subject *Lal*. By contrast, in (1b), with the involitive verb, the act of dancing is either non-volitional or unplanned as far as *Lal* is concerned. 1.2

(1) a. lal natənəwa.

Lal.NOM dance.VOL

'Lal (actively/voluntarily) dances.'
b. lal-tə nætenəwa.

Lal-DAT dance.INVOL

'Lal (involuntarily) dances.'

This volitive/involitive contrast correlates with different case marking possibilities on the external argument of a finite clause (see Gair 1990; Inman 1993; Beaver & Zubair 2010, 2013): a volitive verb almost always takes a nominative subject<sup>3</sup> (1a) and (2), while an involitive verb most often takes a range of non-nominative subjects, including dative (1b) and (3), instrumental (4), and accusative (5):

- (2) lal/\*lal-tə/\*lal-athin/\*lal-wə natənəwa
  Lal.NOM/\*-DAT/\*-INST/\*-ACC dance.VOL.PRES
  'Lal (actively/voluntarily) dances.'
- (3) a. lal-tə nætenəwa
  Lal-DAT dance.INVOL.PRES
  'Lal (involuntarily) dances.'
  - b. lal-tə induwa-k kiyəuna.
    Lal.DAT song-INDEF sing.INVOL.PAST
    'Lal (involuntarily) sang a song.'

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<sup>&</sup>lt;sup>1</sup>In this paper, our focus is on standard colloquial Sinhala as spoken in and around the western province of Sri Lanka. Our informants (age: 30-40 years old), including one of the authors of this paper, are native Sinhala speakers who use it as their most dominant language in day-to-day communication. However, subject case marking and scopal interpretation in Sinhala can be subject to dialectal variation (see e.g., Beavers & Zubair 2010, 2013).

<sup>&</sup>lt;sup>2</sup> Notice that volitive verbs do not strictly entail volitionality. The semantic/pragmatics of the use of volitive and involitive verbs in Sinhala is not the focus of this paper. See Inman (1993) Beavers & Zubair (2010) for details.

<sup>&</sup>lt;sup>3</sup> Beavers & Zubair (2013) and Gair (1990) observe that some volitive verbs such as *dannawa* 'know' can occur with DAT subjects. However, we observe that this is commonly found among Sinhala speakers whose dominant language is Tamil.

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- a. sita-athiη<sup>4</sup> karame kæduna.
   Sita-INST tap.ACC break.INVOL PAST
   'Sita (involuntarily) broke the tap.'
   b. amma-geη sinhala kæmə ho<sup>n</sup>dətə hædenəwa.
   mother-INST Sinhala food.ACC well make.INVOL.PRES
   'Mother makes Sinhala food well.'
- (5) lameya-wə waturə-tə wætuna. child-ACC water-into fall.INVOL.PAST 'The child (involuntarily) fell into water.'

The major goal of this paper is to investigate the syntactic (structural) conditions of subject case assignment and the driving force of A-movement in Sinhala, especially in light of recent developments in Minimalism (Chomsky 1995 & thereafter). We focus on the assignment of nominative case with volitives in this paper, and propose that (i) nominative case is a structural case assigned/valued by a finite T, whereas non-nominative case is an lexical case assigned by the involitive verb, and (ii) involitive subjects remain within vP, whereas the subject of a volitive verb must raise to spec-TP for case assignment/valuation by the finite T. An important consequence of our proposal is that A-movement can be triggered by (structural) case valuation, rather than by a universal EPP requirement on T (contra Gair 1990; see also Chomsky 2000, 2001; Epstein & Seely 2006; Bošković 2002, 2007).

The rest of this paper is structured as follows. Section 2 reviews Gair's (1990) analyses of subject case marking and A-movement in Sinhala. Section 3 discusses empirical challenges for Gair's (1990) analysis. We propose a more empirically adequate analysis in section 4. Section 5 discusses subject case marking under ECM verbs to support our analysis. Section 6 summarizes our findings and discusses their theoretical implications.

### 2. Gair's (1990) analyses of subject case marking and A-movement in Sinhala

Working within the GB framework (Chomsky 1981), Gair (1990) argues that Sinhala does not have typical case-driven A-movement to spec-IP/TP<sup>5</sup>, an operation found in languages such as English. Instead, a subject NP in Sinhala receives lexical case from the verb inside vP at D-structure before it moves to spec-IP to satisfy the EPP (Extended Projection Principle) on INFL. Given the role of lexical semantics associated with subject case marking, Gair (1990) proposes the *Strong Lexical Case Assignment Hypothesis* to account for subject case marking in Sinhala, in which the case assignment of arguments 'bears an intimate connection with θ-role' and 'is fully specified in the lexicon' (p.73). Notice that Gair (1990) does not extend this strong lexical relation between case and θ-role to nominative case in Sinhala because he treats nominative as the default case that is not tied to any particular semantics. He departs from the standard treatment of nominative assignment in the GB theory in the sense that it is the volitive verb rather than a finite INFL that assigns nominative to the subject in Sinhala. Following Kuroda (1998) for Japanese, he proposes that 'weak' INFL in Sinhala, characterized by the absence of agreement, is unable to assign nominative to a subject NP at Spec-IP. As a result, all arguments, including the subject NP, are not only base-generated inside vP but also receive (either lexical or default) case from the verb.

Beavers & Zubair (2010, 2013) define nominative as a semantically neutral case and the default structural case for subjects that arises only when the semantic conditions for all available quirky cases fail. It is worth pointing out that while Beavers & Zubair (2010, 2013). like Gair (1990), treat nominative case as the default case in Sinhala, they (p.3) explicitly distinguish lexical (dative/accusative/instrumental) cases from the default "structural" (nominative) case. In other words, their analysis of nominative case is completely detached from the verb. Notice that the characterization of nominative case as the default "structural" case implies that the assignment of nominative is subject to a certain structural requirement, say, occupying the specifier position of a finite T, as we see in a

<sup>&</sup>lt;sup>4</sup> Sinhala has two distinct morphological forms associated with the instrumental case:  $-athi\eta$  and  $-ge\eta$  (see Gair 1990).

<sup>&</sup>lt;sup>5</sup> We use Tense/TP and INFL/IP interchangeably in this paper.

wide range of languages such as English. However, Beavers & Zubair (2010, 2013) do not propose an explicit structural rule for the assignment of nominative case in Sinhala.

Building upon Beavers & Zubair's core intuition that nominative case is a structural case, this paper aims to argue against Gair's (1990) assumption that the EPP feature on T drives both volitive and involitive subjects to spec-TP. Our argument is based on the scope interpretation of subject quantifiers. These heretofore unnoted data examined in the next section lead us to argue for the following three points:<sup>6</sup>

- (6) a. Only involitive verbs assign lexical case to their external arguments, while volitive verbs are not lexically related to subject case marking in any way.
  - b. Subjects that do not receive lexical case within vP raise to the specifier of a finitie T to receive the structural nominative case.
  - c. A-movement in Sinhala is triggered by case valuation, rather than by a universal EPP feature on T.

# 3. Volitivity and the interpretation of quantifier NPs

We find that a subject universal quantifier has scopal interaction with negation only in sentences with volitive verbs, as in (7), which is ambiguous between total negation and partial negation. By contrast, when we replace the volitive verb in (7) with an involitive counterpart as in (8), only the partial negation interpretation is available. Therefore, (8) cannot be uttered in a context where no child danced involuntarily, or no child danced at all.

- (7) lamai hæmo-mə nætuwe næhæ.
  children all.NOM-EMP danced.VOL not
  'All children did not (voluntarily) dance.' [Total negation = all > negation]
  'Not all children (voluntarily) danced.' [Partial negation = negation > all]
- (8) lamai hæmo-tə-mə nætune næhæ.
  children all-DAT-EMP danced.INVOL not
  #'All children did not (involuntarily) dance.' [#Total negation = all > negation]
  'Not all children (involuntarily) danced. [Partial negation = negation > all]

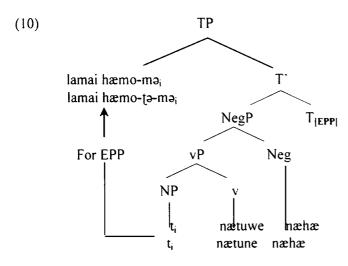
This effect on the scopal interpretation of the subject quantifier is previously unnoted to the best of our knowledge. The contrast between (7) and (8) is not easily explained by Gair's (1990) analysis of subject case marking and A-movement in Sinhala. Suppose we follow Gair (1990) and assume that INFL/T in Sinhala is endowed with a universal EPP property that induces obligatory A-movement to spec-TP, and follow Nevins (2005) to abandon the Activity Condition in (9). The universal quantifier subject NPs in (7) and (8) should then both raise to spec-TP to satisfy EPP, even though they have already been assigned case within vP, as in (10). Consequently, the negation næhæ c-commands the lower copy of the universal quantifier subject within vP and is also c-commanded by the higher copy at spec-TP. Therefore, (7) and (8) are wrongly predicted to exhibit both total and partial negation interpretations.

<sup>&</sup>lt;sup>6</sup> The new data examined in the next section show that dative subjects with involitive verbs behave differently from nominative subjects with voitive verbs. We leave for future work the question whether this contrast extends to the rest of lexically assigned cases (e.g., instrumental and accusative).

<sup>&</sup>lt;sup>7</sup> Some researchers argue that negation may not be a unique and rigid head occupying a fixed scope position in phrase structure (Boeckx 2001, Ladd 1981 Büring & Gunlogson 2000 for English and von Stechow & Penka 2003 for German). However, how such a view on the scope position of negation solves the issue at hand in Sinhala remains unclear. In particular, there is no principled account for why negation could have varied scope positions in relation to the nominative subject, but not to the dative subject. Thus, in this paper, we maintain the hypothesis that negation heads a projection between TP and vP in Sinhala.

- (9) a. Inactivity of an XP:
  - An XP that eliminates its uninterpretable features (case, -wh) is rendered inactive.
  - b. The Activity Condition:

Inactive elements are not accessible for further (syntactic) operations.



A clarification about reconstruction is in order before we can conclude that EPP on T does not exist in Sinhala. Note that the scopal contrast observed in (7) and (8) reminds one of the scopal contrast between nominative and ergative subjects in Hindi/Urdu in (11) (a novel observation made in Nevins & Anand 2003 and Anand & Nevins 2006).

- (11) a. koi shaayer har ghazal likhtaa hai [B > V; V > B] some poet-NOM every song-ACC write.m-IMPF be-PRES
  - 'Some poet writes every song.'
  - b. kisii shaayer-ne har ghazal likhii  $[\exists > \forall; \forall > \exists]$  some poet-ERG every song-NOM write.f.PERF
    - 'Some poet wrote every song.'

While (11a) with the nominative subject admits an inverse scope reading ( $\forall$  > 3), (11b) with the ergative subject can only be interpreted with surface scope (3 >  $\forall$ ). Anand & Nevins (2006) maintain that while nominative case is a structural case based on the  $\varphi$ -AGREE relation between T and an NP, ergaive case is a lexical case associated with the theta-role of agent in Hindi (see also Woolford 1997 and Ura 2000). In addition, they assume that EPP on T drives the movement of both nominative and ergative subjects to spec-TP. They claim that the relevant difference between ergative and nominative subjects responsible for scopal rigidity in (11b) is the absence of a  $\varphi$ -AGREE relation between the ergative subject and T, which renders the reconstruction of the ergative subject back to spec-vP inapplicable, in accordance with the restriction on reconstruction in (12).

(12) Agreement-allows-Reconstruction: Reconstruction of an XP from [the specifier of, CTC & SH] a head H is possible iff H AGREEs with XP (Anand & Nevins 2006: 10).

However, we do not see how the presence or absence of φ-AGREE with T helps us with the contrast between nominative and dative subjects in (7) and (8). Specifically, suppose we follow Gair (1990) in assuming the presence of EPP on T in Sinhala which drives movement of both nominative and dative subjects to spec-TP, the absence of agreement features on T in Sinhala (which Gair also assumes) should render both nominative and dative subjects unable to undergo reconstruction back to a position below negation, wrongly predicting that the partial negation interpretation is unavailable in (7)

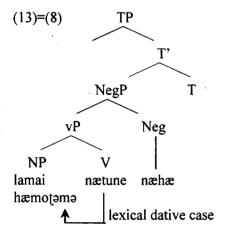
<sup>&</sup>lt;sup>8</sup> Hindi/Urdu is an aspectually-split-ergative language showing ergative subject marking and agreement with the object in perfective aspects.

and (8). Therefore, without the help of reconstruction (as formulated by Anand & Nevins 2006), once we move both volitive and involitive subjects to spec-TP, in accordance with Gair's EPP-based analysis of A-movement, there is no way for the subjects to go back to spec-vP to yield the partial negation interpretation.

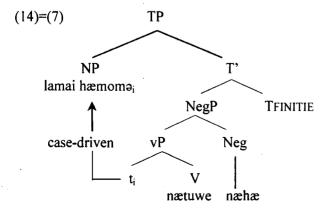
Besides, if we assume Sinhala exhibits phonologically null  $\varphi$ -AGREE with T, and nominative case is assigned based on  $\varphi$ -AGREE, the nominative subject would be allowed to reconstruct to yield the partial negation interpretation, a correct result. However, an EPP-based analysis would still wrongly predict the total negation interpretation in (8). Therefore, we conclude that the EPP-based analysis of A-movement in Sinhala is not on the right track, and some other force is responsible for moving only the volitive subject, crucially not the involitive one, to spec-TP to yield the total negation interpretation in (7), presumably structural nominative case valuation. In effect, this amounts to the claim that nominative case in Sinhala is not assigned within vP (as the default case in Gair 1990 and Inman 1994). Rather, it is a structural case, in line with Beavers & Zubair's (2010, 2013) core intuition.

### 4. Analysis

In this section, we show how the assumptions in (6) can account for the empirical challenge presented in the previous section. First, the scopal contrast between (7) and (8) follows from our proposal that only involitive verbs assign lexical case to their subject NP. Therefore, once the involitive subject lamai hæmotəmə 'all children' in (8) is base-generated in spec-vP, it receives lexical dative case from the involitive verb within the involitive vP and becomes inactive for further movement to spec-TP for case valuation, thereby yielding only the partial negation reading, as in (13).



On the other hand, volitive verbs in Sinhala are not lexically related to subject case marking in any way. Therefore, in (7), the relevant structure of which is shown in (14), the subject NP does not get case within the vP, and hence needs to move to spec-TP to value its case feature as nominative. Consequently, the negation  $n\alpha h\alpha$  c-commands the lower copy of the subject quantifier at spec-vP and is also c-commanded by the higher copy at spec-TP, correctly yielding the scopal ambiguity.



In the next section, we examine subject case marking under ECM verbs to provide further support for our assumption that case valuation, rather than EPP, triggers obligatory A-movement in Sinhala.

# 5. Subject case marking under ECM verbs

As first noted by Sumangala (1991, 1992), Sinhala allows exceptional (accusative) case marking on the embedded subject by ECM verbs like *dannava* 'know'.

(15) mamə [gunapalə/gunapalə-wə aava kiyəla] dannəwa.
I.NOM Gunapala.NOM/Gunapala-ACC come.VOL.PAST COMP know.VOL.PRES
'I know (that) Gunapala came.'

What distinguishes our proposal from Gair's (1990) is that we maintain that structural case valuation, rather than EPP, drives obligatory A-movement in Sinhala. Therefore, no matter what the correct analysis of the nominative/accusative alternation in (15) turns out to be, one clear prediction of our analysis is that only accusative subject, but not the nominative one, moves out of the embedded clause in (15) to the specifier of the verb phrase hosted by the ECM verb. In what follows, we present four pieces of supporting evidence to show that this prediction is borne out.

First, notice that the embedded subject cannot be bound by the matrix subject when it bears accusative, as shown by (16). This is because the embedded subject, to get accusative case, has to move to the matrix spec-vP, where its co-reference with the matrix subject would violate Binding Principle B.

(16) rajəthuma<sub>j</sub> eya<sub>i/j</sub>/eya-wə<sub>i/\*j</sub> weerəye-k kiyəla] hithənəwa. king.NOM he.NOM/he-ACC hero-INDEF COMP think.VOL.PRES 'The king thinks that he is a hero.'

Second, the embedded subject can bind the anaphor in the matrix adverbial only when it bears accusative case, as shown by the contrast between (17) and (18). The embedded subject, if assigned nominative, does not move out of the embedded clause, so the embedded nominative subject is not at a position high enough to bind the anaphor in the matrix adverbial, violating Binding Principle A.

- rajathuma æməthiwarun-wə wærəd-i kiyəla thamə-thamange ware-di oppu-kəla. king.NOM ministers-ACC guilty-is COMP each-other's trial-during prove-PAST 'The king proved the ministers to be guilty during each other's trial.'
- (18) ??rajathuma æməthiwaru wærəd-i kiyəla thamə-thamamge ware-di oppu-kəla. king.NOM ministers.NOM guilty-is COMP each-other's trial-during prove-PAST 'The king proved the ministers to be guilty during each other's trial.'

Third, the placement of adverbs also lends support to our proposal. Notice that the adverb modakama-ta 'foolishly' in (19) modifies the ECM verb hithanawa 'think', so it should adjoin to the vP hosted by the ECM verb to take scope over the ECM verb.

<sup>&</sup>lt;sup>9</sup> Notice that the accusative case in (15) becomes unavailable when either the ECM context is removed as in (i) or the embedding verb dannava is replaced by a non-ECM verb like dækka 'see' as in (ii). This confirms the assumption that the accusative case on the embedded subject in (15) comes from the matrix ECM verb dannava 'know'.

<sup>(</sup>i) gunapalə/\*gunapalə-wə aava.
Gunapala.NOM/\*-ACC come.VOL.PAST
'Gunapala came.'

<sup>(</sup>ii) mamə [gunapalə/\*gunapalə-wə aava kiyəla] dækka.

I.NOM Gunapala.NOM/\*-ACC come.VOL.PAST COMP see.VOL.PRES
'I saw (that) Gunapala came.'

minissu modekame-te rajethuma/rajethuma-we weereye-k kiyela hithenewa. people.NOM foolish-ly king. NOM/-ACC hero-INDEF COMP think.PRES 'People foolishly think that the king is a hero.'

Intriguingly, the embedded subject, if marked accusative, could precede the adverb sitting high in the matrix clause, as in (20a). In contrast, the nominative-marked subject must follow the adverb, as shown in (20b).

(20)a. minissu rajethuma-we modekame-te weereve-k kivəla hithənəwa. people.NOM king-ACC foolish-ly hero-INDEF COMP think.PRES b. \*minissu raiəthuma modəkamə-tə weerəve-k kiyəla hithənəwa. people.NOM king.NOM foolish-ly hero-INDEF COMP think.PRES

This contrast follows from our proposal because the embedded subject, to get accusative case from the ECM verb in the matrix clause, must raise to spec-vP. Besides, the flexible relative order of the accusative subject with the matrix adverb can be explained if we follow Chomsky's (1995) proposal of Bare Phrase structure with multiple specifiers, where traditional adjuncts can be treated as (additional) specifiers. In fact, the traditional specifier-adjunct distinction can be eliminated under Bare Phrase structure. Therefore, there is flexible ordering between the (raised) accusative subject and the matrix adverb.

Finally, additional evidence comes from Long Distance Scrambling (LDS) in Sinhala. Similar to Japanese (see Saito 1985; Tanaka 2002), Sinhala does not allow LDS of an embedded subject to the matrix clause initial position, as shown in (21). But surprisingly, this restriction does not apply to the accusative-marked subject as shown in (22).

- (21) \*eya; rajəthuma [t, weerəye-k kiyəla] hithənəwa.
  he.NOM king.NOM hero-INDEF COMP think.PRES
  'The king thinks that he is a hero.'
- eya-wə, rajəthuma [t, weerəye-k kiyəla] hithənəwa. he-ACC king NOM hero-INDEF COMP think.PRES 'The king thinks that he is a hero.'

One possible explanation for this contrast based on our proposal is that the embedded subject moves out of the embedded clause for accusative case, thereby becomes free from the restriction of LDS of embedded subjects.<sup>10</sup>

One may argue that the syntactic properties exhibited by the embedded accusative subject in ECM contexts do not necessarily follow from syntactic movement from the embedded clause to the matrix clause; rather, the accusative subject might be base-generated at the matrix clause, along the lines suggested by Wechsler's (1995) analysis of Korean ECM. We maintain that this base-generation analysis is not tenable in Sinhala because the scopal ambiguity of nominative volitive subjects in relation to the negation discussed in the last section also holds in the ECM context, regardless of the nominative/accusative alternation on the embedded subject. If the accusative subject were base-generated in the matrix clause, we would wrongly predict the lack of scopal interaction between the embedded negation and the accusative subject.

<sup>(</sup>i) siri lamai hæmo-mə nætuwe næhæ kiyəla dannəwa.

Siri.NOM children all.NOM-EMP danced.VOL not COMP know.PRES

'Siri knows that all children did not dance.' [Total negation = all > negation]

[Partial negation = negation > all]

<sup>(</sup>ii) siri lamai hæmo-wə-mə nætuwe næhæ kiyəla dannəwa.
Siri.NOM children all-ACC-EMP danced.VOL not COMP know.PRES
'Siri knows that all children did not dance.' [Total negation = all > negation]
[Partial negation = negation > all]

### 6. Summary and Theoretical Implications

In this paper, we argue that nominative case in Sinhala is not a default case. Rather, it is a structural case assigned by a finite T, and the need for structural case valuation drives the movement of subject NPs of volitive verbs to spec-TP. Two important implications of our proposal are that (i) there is no universal EPP requirement on T in Sinhala (contra Gair 1990), and (ii) case-valuation can be the driving force of A-movement to spec-TP. We have seen how Gair's EPP-based account of A-movement in Sinhala yields incorrect predictions about the scopal interpretation of subject quantifiers. In this section, we would like to discuss the second implication about the motivation of A-movement.

There are several proposals concerning a motivation for A-movement in generative literature. Three distinct driving forces identified by different researchers that are responsible for triggering A-movement to spec-TP include (i) the unvalued φ-features on T (e.g., Kuroda 1988; Miyagawa 2005), (ii) the EPP feature on T (e.g. Chomsky 1995, 2000, 2001; Lasnik 1995, 1999, 2001; Nevins 2005), (iii) the unvalued Case feature on an NP (e.g. Epstein & Seely 1999, 2006; Alexiadou & Anagnostopoulou 1998; Bošković 2002, 2007). The data examined in this paper lead us to conclude that neither EPP nor φ-features on T triggers A-movement in Sinhala. Recall that Gair (1990: 142) maintains that "AGR plays no role in Sinhala, to the extent that there is no element within INFL that plays its subject case assignment role". Here, we provide an additional piece of evidence for the lack of agreement features on T in Sinhala. Note that as is well-known, English does not allow subject reflexives in a finite clause as illustrated in (23):

#### (23) \*John thinks that himself is hard-working.

Rizzi (1990) proposes the anaphor agreement effect in (24) and argues that the reason why anaphors are barred from the subject position of tensed clauses as in (23) is that anaphors cannot agree.

(24) The anaphor agreement effect<sup>11</sup>
Anaphors do not occur in syntactic positions construed with agreement.

Citing Icelandic and Italian data, Rizzi (1990) argues that neither nominative case (see Brame 1977, Koster 1978, Anderson 1982, Maling 1984, Everaert 1991) nor the subject position (see Kayne 1984, 1994, Chomsky 1986) accounts for the ban on subject anaphors. Rather, it is agreement that causes the ungrammaticality (cf. Chomsky 1981, George & Kornfilt 1981, Johnson 1985, Picallo 1985). He maintains that the anaphor agreement effect "holds quite systematically in natural languages" (Rizzi 1990:26). Building upon Rizzi's work, Woolford (1999) argues that the anaphor agreement effect is universal and can be a diagnostic for the presence or absence of (covert) agreement. With this conclusion, consider the grammatical occurrence of subject anaphors in (25). 12

<sup>&</sup>lt;sup>11</sup> There are several analyses aiming at deriving (24). For example, Chomsky (1981:209) regards agreement on T as an accessible SUBJECT for the purposes of determining the binding domain, so a subject anaphor exhibiting agreement must be bound by the agreement on T; however, this leads to an *i*-within-*i* violation where the subject anaphor and the agreement on T enter into an infinitive regression relation due to dependence on each other for reference (see also Johnson 1985 for a similar proposal).

<sup>12</sup> Unlike Chinese (see Huang & Liu 2001), Sinhala does not have the bare-compound distinction of the

<sup>&</sup>lt;sup>12</sup> Unlike Chinese (see Huang & Liu 2001), Sinhala does not have the bare-compound distinction of the morphological form of reflexives. It only has the bare reflexive thaman 'self'. Accordingly, one may wonder whether thaman, as an embedded subject, is used as a logophor whose distribution has nothing to do with the presence or absence of φ-features on T, and hence (25) does not constitute an argument for the lack of φ-features on T in Sinhala. Note that Huang & Liu (2001) show that the bare reflexive ziji in Chinese can be used either as a logophor or an anaphor. Importantly, when occurring as an embedded subject. ziji is not subject to various logophoric conditions (e.g. under a de se scenario). This observation carries over to the bare reflexive thaman 'self' in Sinhala. The sentence in (25) can be uttered under a non-de se scenario in which the coreference between thaman and Siri is reported purely as speaker's knowledge from the speaker's own perspective. This indicates that thaman in (25) can be an anaphor, rather than a logophor, and thus its grammatical occurrence as an embedded subject constitutes an argument against the presence of φ-features on T in Sinhala.

(25) Siri hitanawa [thaman awanka-i kiyala].
Siri think PRES self NOM honest-is COMP
'Siri thinks that himself is honest.'

The grammatical occurrence of subject anaphor in Sinhala suggests that there are no agreement features on T in Sinhala to either drive A-movement to spec-TP or value subject's case feature as a reflex of offeature valuation as proposed by Chomsky's (2000, 2008). In addition, thaman, as the embedded subject, can carry the accusative case from an ECM verb, as shown by (26).

(26) mamə [thaman/thaman-wə parə dannəwa kiyəla] dannəwa I.NOM self.NOM/-ACC way know.VOL.PRES COMP know.VOL.PRES 'I know myself to knw the way.'

The accusative case on thaman in (26) provides overt evidence that thaman is able to carry case markers. Therefore, even though nominative case is not morphologically realized in Sinhala, we can assume that in (25), thaman carries nominative case valued by the embedded finite T, in the absence of agreement features on T. Thus, given that neither EPP nor  $\varphi$ -features on T is responsible for the Amovement to spec-TP in Sinhala, we conclude that case-feature valuation alone can motivate Amovement.

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