

Word Order and the Floating Quantifier in Cebuano

Yumiko Ishikawa

1. Introduction

The sentential subject long had been considered to be base-generated in Spec IP and to be assigned nominative Case under Spec-head agreement within the generative literature. Koopman and Sportiche (1985) challenge this idea and propose the VP Internal Subject Hypothesis (hereafter VISH), which states that the subject is base-generated in Spec VP. They argue further that in some languages such as English, French, and Dutch, the subject moves from Spec VP to Spec IP, as illustrated below:

- (1) [_{IP} The man₁ [_I I [_{VP} t₁ [_{V'} bought rice]]]]

Guilfoyle, Hung, and Travis (1992) analyze the word order facts about Austronesian languages (Malagasy, Bahasa, Cebuano and Tagalog) within the Government and Binding (GB) framework and support the VISH. The relevant examples from Malagasy are given below:¹

- (2) a. Mividy vary ho an'ny ankizy **ny lehilahy**.
buy-AT rice for the children the man
- b. Vidin'**ny lehilahy** ho an'ny ankizy ny vary.
buy-TT-the man for the children the rice
- c. Ividianan'**ny lehilahy** vary ny ankizy.
buy-CT-the man rice the children
- 'The man buys rice for the children.' (Keenan 1976)

The external argument, *ny lehilahy*, for instance, follows the verb unless it is interpreted as Topic of the sentence. The verb consistently shows agreement with the DP in the sentence-final position, which is interpreted as Topic. The relevant DP seems to be assigned structural Case because *ny ankizy* is preceded by a case-marker *ho* in (2a-b), while it is not in (2c). Using evidence which demonstrates the subjecthood of Topic from extraposition and quantification tests,

¹ The DP in bold is the external argument and the DP underlined is the subject. The abbreviations used in this paper are given below:

AT - Agent-Topic, TT - Theme-Topic, LT - Location-Topic, CT - Circumstantial-Topic
LN - linker, EA - external argument, OBL - oblique, NOM - nominative, GEN - genitive
PL - plural, CL - classifier

they argue that the external argument is generated in Spec VP, being assigned Case from V, whereas Topic undergoes rightward movement from its initial position to Spec IP to be assigned Case from Infl.² The phrase structure of (2c) is given below, for illustration:³

- (3) [IP [I' V-I [VP Agent [V' t₁ [V' t_V Theme] CT₁]]
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Notice that there is a big difference between English and Malagasy. It is only an external argument that can move to Spec IP in English transitive sentences, while any DP can move there in Malagasy. This property of Austronesian languages raises an interesting question about a floating quantifier. If a floating quantifier is stranded in the initial position of the moved DP, as discussed in Sportiche (1988), its position should be dependent on which DP moves to Spec TP. If a floating quantifier is a modifier, as discussed in Dowty and Brodie (1984) and Nakanish (2004), its position will be independent on what moves to Spec TP. This paper has two goals. One of them is to examine the word order issue in Cebuano, which is categorized in the Austronesian languages, within the minimalist framework to support the VISH. The other is to examine whether the floating quantifier is a residue of the moved element or a modifier. We will see that Cebuano allows two DPs to move to Spec TP. We will also find that the floating quantifier in this language is a subject-oriented adverb.

This paper is organized as follows. Section 2 discusses the word order issue in Cebuano. The basic insight that emerges from this section is that T in Cebuano projects multiple specifiers. This property allows two DPs to move to Spec TP. Section 3 examines the interaction of positions between the floating quantifier and the nominative Case-marked argument. We will see that Sportiche's stranded approach has problems in explaining the prohibition on putting the quantifier in the verbal domain. Section 4 concludes the paper.

2. Multiple Specifier

In this section, we observe the difference in word order between Malagasy and Cebuano, and consider how surface word order is derived from the underlying structure. The verb in Cebuano shows the same type of agreement with the one observed in Malagasy, as illustrated below:

- (4) a. Nagbasa tanan **ang istudiante** sa mga libro ni Rizal.
read-AT all NOM student OBL PL book GEN Rizal
 'The students were all reading Rizal's books.'

² In the case that the external argument is interpreted as Topic as in (1a), it cannot be assigned Case from V so that it moves from Spec VP to Spec IP to obtain Case from Infl.

³ They assume that V moves to INFL in Austronesian languages because V comes first.

- b. Gibsa tanan sa mga istudiante **ang mga libro** ni Rizal.
read-TT all GEN PL student NOM PL book GEN Rizal
 'Rizal's books were all being read by the student.' (Bell 1983: 155)

The verb shows agreement with the Agent-Topic in (4a), while it agrees with the Theme-Topic in (4b). The DP that the verb agrees with should be in some relation with T because it is assigned nominative Case. As we observed in the previous section, the DP responsible for verbal agreement undergoes rightward movement to Spec IP and appears in the sentence-final position in Malagasy. On the other hand, the relevant DP seems to stay in its initial position in Cebuano. One might consider that nominative Case assignment in this language does not require movement.

The contrast between the following examples shows, however, that the relevant DP actually undergoes movement:

- (5) a. Nagbutang tanan **ang mga babaye** sa mga pinggan sa mga lamisa.
place-AT all NOM PL woman OBL PL dish OBL PL table
 'The women were all putting the dishes on the tables.'
- b. Gibutangan tanan sa mga babaye **ang mga lamisa** sa mga pinggan
place-LT all GEN PL woman NOM PL table OBL PL dish
 'The tables were all put dishes on by the woman.' (ibid.)

The locative phrase *lamisa* stands in the sentence-final position in (5a). In contrast, it is situated between the external argument and the direct object when it is assigned nominative Case, as shown in (5b). Given that the nominative Case-marked DP raises to Spec TP, this fact indicates that the verb and the external argument move to the higher position than Spec TP. Suppose that V moves to C, as observed in German. Then, we can explain why the verb precedes the nominative Case-marked DP. Notice that this analysis implies that there is a position available for the external argument between Spec TP and C. Otherwise, we cannot explain why the external argument always follows the verb and precedes the nominative Case-marked DP.

Such a position seems to be available at least in some languages. Japanese double nominative constructions as in (6) provide such an instance.

- (6) Taro-ga sono hon-o/-ga yom-e-ta (koto)
Taro-NOM that book-ACC/NOM read-can-PAST (fact)
 'Taro was able to read that book.' (modified from Miyagawa 2001: 307)

In this example, the object can be marked by either the accusative or the nominative marker. In

the nominative option, both of the subject and the object are assigned nominative Case. Assuming that T allows multiple specifiers, Ura (1996) proposes that both the nominative arguments move to Spec TP to be assigned Case, as schematized below:

(7) [TP Subj₁-NOM [TP Obj₁-NOM [T' T [_{vP} t₁ v [_{VP} t₂ V]]]]]

Following the multiple specifier analysis, derivation of (5b), proceeds as in (8a) or as in (8b):

(8) a. [CP C [TP EA₁-GEN [TP LT₂-NOM [T' T [_{vP} t₂ [_{vP} t₁ [_{v'} v [_{VP} [_{v'} V Obj] t₂]]]]]]]]]
 b. [CP C [TP EA₁-GEN [TP LT₂-NOM [T' T [_{vP} t₁ [_{vP} t₂ [_{v'} v [_{VP} [_{v'} V Obj] t₂]]]]]]]]]

In (8a), Location-Topic first moves to the outer Spec of *vP* and undergoes subsequent movement to the inner Spec of TP. The external argument crosses the nominative Case-marked DP when it raises to Spec TP. This might yield the violation of the Defective Intervention Constraint (Chomsky 2000). It is also mysterious how the position of the moved element is determined. In contrast, derivation in (8b) consistently follows the Shortest Move (Richards 1997). Location-Topic first moves into the lower Spec of *vP*, namely tucks in below the external argument. Then, the external argument moves to the outer Spec of TP whereas Location-Topic undergoes movement to the inner Spec of TP without violating the Defective Intervention Constraint. Based on this observation, I propose that the internal Merge follows the Shortest Move.

Notice that the external argument is not assigned nominative Case in Cebuano. Compared with Japanese double nominative constructions, this fact might pose a problem to the analysis presented here. There are two possibilities to explain the difference between these two languages. One of them is to attribute the property of T (or the features inherited from C to T). Specifically, T in Cebuano assigns nominative Case to the DP in the inner Spec and assigns genitive Case to the DP in the outer Spec, while T in Japanese assigns nominative Case to both DPs in its specifiers. However, it is implausible to assume that T has the ability to assign both nominative and genitive Case.⁴ Let us then consider the alternative. Suppose that the external argument is assigned inherent Case in its initial position. Then, the difference between Japanese and Cebuano can be attributed to the difference in what type of Case is assigned in Spec *vP*. The DP in Spec *vP* is assigned inherent nominative Case in the former whereas the one receives inherent genitive Case in the latter.⁵ Accordingly, the fact that the external argument in Cebuano is assigned genitive

⁴ Nomura (2005) claims that T assigns both nominative and genitive Case in Icelandic quirky subject constructions and Japanese dative subject constructions. However, he admits that his analysis needs stipulation to rule out the multiple appearance of nominative DPs in Icelandic.

⁵ Saito (1983) argues that nominative Case in Japanese is an inherent Case on the independent ground.

Case strongly supports the VISH.

3. Positions of the Quantifier in Cebuano

We have seen that two DPs can move out of *vP* to Spec TP in Cebuano. This property is particularly interesting when we discuss the interaction of the position of a quantifier and the one of the quantified element in this language. According to Sportiche (1988), a floating quantifier and the quantified DP form a constituent at some point in the derivation and in a later step, the DP may move out of this constituent, leaving the quantifier stranded. Let us look at the near-paraphrase in (10), for illustration.

- (9) a. All the men have left the party.
 b. The men have all left the party.

The sentence in (10a) results from the derivation in (10b), in which the quantifier raises to Spec TP together with the quantified DP. The quantifier in (9b), on the other hand, does not move but stays in the initial position, as shown in (10b).

- (10) a. [_{TP} [_{QP} all the men]_i [_{T'} have [_{VP} *t*_{QP} left the party]]]
 b. [_{TP} [the men]_i [_{T'} have [_{VP} [_{QP} all *t*_i] left the party]]]

If this analysis of a floating quantifier is on the right track, it provides further supporting evidence for the VISH, as the stranded (floating) quantifier can mark the *vP*-internal position where the subject is generated.

Before examining the examples of transitive sentences in Cebuano, in which two DPs move out of *vP*, let us look at the intransitive sentences. As shown in (11), a quantifier can occupy three different positions in intransitive sentences.

- (11) a. Ningdagan ang- [tanang nga bata']. b. Ningdagan ang- [batang tanan].
run *NOM all LN child* *run* *NOM child-LN all*

The analysis presented here supports the claim that nominative subject in Japanese does not have to move to Spec TP (Fukui (1986), Kuroda (1988), among many others). However, the motivation for the multiple specifier analysis might be nullified. One way to solve this problem is to assume that the nominative subject in Japanese is assigned inherent nominative Case in Spec *vP* and moves to the outer Spec of TP to obtain structural nominative Case (see Belletti (1988) who first raises the possibility of combining inherent and structural Case). This assumption implies that T in Cebuano assigns Case only to one argument whereas the one in Japanese have the ability to assign Case to multiple arguments. I just follow the argument that TP can have multiple specifiers in some languages and leave the matter of the position of subject in Japanese open for future research.

- c. Ningdagan tanan ang- [bata'].
run all NOM child
 'All the children ran off.'

The quantifier follows the nominative Case-marker *ang* in (11a) and (11b). In either case, it is linked to the noun by the linker *nga*. When it precedes the nominative Case-marker as in (11c), the linker does not appear. Among the three ways of quantifying noun phrases, only the one exemplified in (12c) is considered to be an instance of floating quantifiers. This is supported by the fact that the adjective *pula*, for example, should be interpreted as the predicate only in エラ一! 参照元が見つかりません。c).

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|---------|----------------------|----|----------------------|----|-----------------------|
| (12) a. | bulak nga pula | b. | pulang bulak | c. | Pula ang bulak. |
| | <i>flower LN red</i> | | <i>red-LN flower</i> | | <i>red NOM flower</i> |
| | 'red flower' | | 'red flower' | | 'The flower is red.' |

Based on the parallelism between (11) and (12), I consider that the examples in (11a) and (11b) show that there are two positions for quantifiers within the noun phrase and the example in (11c) will be focused in the following discussion.

To obtain the word order in

c) under Sportiche's stranded approach, we need to assume that the external argument *bata'* undergoes the rightward movement as illustrated below:

- (13) [CP ningdagan-C [TP T [vP [QP tanan t_{DP}] v [VP V]] ang-[DP bata']]]

Unfortunately, this analysis is inconsistent with the findings in the previous section. To be specific, the external argument does not move rightward but it undergoes leftward movement, as shown in (14a).

- (14) a. [CP ningdagan-C [TP ang-[DP bata'] T [vP [QP tanan t_{DP}] v [VP V]]]
 b. [CP ningdagan-C [TP [QP tanan t_{DP}] [TP ang-[DP bata'] T [vP t_{QP} v [VP V]]]]

Accordingly, the quantifier is not stranded in the initial position of the external argument, namely Spec vP, but should be located between Spec TP and C, as illustrated in (14b).⁶ Let us examine whether this analysis is correct by looking at the positions of a quantifier and the quantified

⁶ One might notice that the trace of *bata* is unbounded, violating the Proper Binding Condition.

element in transitive sentences.

In transitive sentences, the quantifier appears between the verb and the external argument, as shown in (4) and (5). Despite the fact that the quantifier lies in the same position, it is construed with the nominative Case-marked DP and with it alone in all of these examples. Given the analysis presented so far, the derivation of the examples in エラー! 参照元が見つかりません。 b) and エラー! 参照元が見つかりません。 d), for instance, should proceed as in (15a) and (15b) respectively:

- (15) a. [CP C [TP [QP tanan t_2] [TP EA₁-GEN [TP TT₂-NOM T [vP t_1 [vP t_{QP} v [VP V t_{QP}]]]]]]]]]
 b. [CP C [TP [QP tanan t_2] [TP EA₁-GEN [TP LT₂-NOM T [vP t_1 [vP t_{QP} v [VP [v' V Obj] t_2]]]]]]]]]

Let us recall now that Sportiche's analysis of the English example in (9a), repeated here as (16a). The quantifier does not undergo movement but stays in its initial position, as illustrated in (16b).

- (16) a. The men have all left the party.
 b. [TP [the men]₁ [T' have [VP [QP all t_1] left the party]]]

This observation raises the possibility that movement of the quantifier to Spec TP in Cebuano is optional. In fact, this kind of optionality can be found in Japanese, as exemplified below:

- (17) a. Hanako-ga [QP [DP hon]-o san-satu] katta.
Hanako-NOM book-ACC 3-CL bought
 b. [QP San-satu t_{DP}] (sono mise-de) [DP hon]-o Hanako-ga t_{QP} katta.
3-CL the shop-in book-ACC Hanako-NOM bought
 c. [DP Hon]-o Hanako-ga [QP t_{DP} san-satu] katta.
book-ACC Hanako-NOM 3-CL bought
 'Hanako bought three books.'

In (17b), both the quantifier and the object undergo movement. This is the same pattern with the one observed in Cebuano as we have seen in (15). In (17c), on the other hand, only the object raises and the quantifier stays in situ in parallel with the pattern observed in English example in (16). Thus, it is predicted that the quantifier can be stranded in situ in Cebuano as well. Contrary to this prediction, the quantifier cannot appear in the initial position of the quantified element in Cebuano, as exemplified in the sentences in (18).

- (18) a. *Gibsa sa mga istudiante ang- [[mga libro] ni Rizal] tanan.

In these examples, the quantifier precedes the verb, which is located in C. This fact indicates that the quantifier lies in the higher position than C, namely Spec CP. Despite its difference with the position from the examples in (16), it is still construed with the nominative Case marked DP.⁸ It is important to notice that the quantifier in エラー! 参照元が見つかりません。) and (20) stays in the same position with TP-adverbs as in (21a) and CP-adverbs as in (21b) respectively.

- (21) a. John *cleverly/clumsily* dropped his cup of coffee.
b. *Cleverly/Clumsily* (,) John dropped his cup of coffee.

The adverbs exemplified above modify the subject and are discriminated from the sentential adverbs, which modifies the whole sentence as in (22).

- (22) Probably/Evidently John dropped the cup.

Based on this observation, I propose that the quantifier in Cebuano is a modifier corresponding to the subject-oriented adverb in English.

This proposal overcomes the problem in the stranded analysis and gives a clue to explain why (18a) is ruled out. It is well known that the subject-oriented adverbs in English cannot appear in the sentence-final position. When the adverbs like *cleverly*, for instance, appears in this position as in (23), it is interpreted in the different manner from (21b).⁹ The former means that the manner in which John dropped his cup of coffee was clever, while the latter denotes that it was clever of John to drop his cup of coffee.

- (23) *John dropped his cup of coffee *cleverly*. [as a subject-oriented adverb]

That is, エラー! 参照元が見つかりません。) is ruled out due to the general ban on putting the subject-oriented adverb within the vP domain.¹⁰ Therefore, I conclude that the quantifier in Cebuano is not a residue of movement but is a modifier which shares the same properties with the subject-oriented adverb in English.

In sum, a quantifier can be generated in four different positions in Cebuano: two of these are

⁸ I consider that T still mediates the relation between the quantifier in Spec CP and the quantified element in Spec TP because T moves to C.

⁹ The sentence in (21a) is ambiguous between the subject-oriented and manner adverbial.

¹⁰ I assume that some feature of the subject-oriented adverbs cannot be licensed within the CP domain.

within DP and the others are outside DP. Contrary to the prediction borne by the stranded approach, the position of a floating quantifier is irrelevant to the initial position of the moved element at least in Cebuano. However, the quantifier is still an important tool in finding the subject of the sentences due to the fact that it is a subject-oriented adverb.

4. Concluding Remarks

In this paper, we have discussed two phenomena in Cebuano. One of them is the fact that the nominative Case-marked DP seems to be situated in the middle of the sentence. To explain this word order issue, I have proposed that T projects multiple specifiers in this language and that it makes possible for two DPs to move to Spec TP. Therefore, the analysis presented here strongly supports the VISH. On the other hand, the second phenomenon, we have discussed in this paper, raises a problem to the stranded approach to the floating quantifier, which is considered to provide supporting evidence to the VISH as well. The fact is that the position of the quantifier is not relevant to the initial position of the moved element at least in Cebuano. Rather, it should be generated in the position close to the goal of the moved element. Due to the lack of space, we have not examined whether the same holds of the other languages. I consider that the further study will provide a unified account to the parallelisms observed in languages like Japanese.

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