

A Minimalist Account of Scrambling and Word Order in Tagalog

Testing its Grammaticality

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*Tagalog, a free word order language, is typologized as a VSO language. Debates whether Tagalog follows an ABS-ERG or NOM-ACC pattern still hold. In the advent of the Minimalist Program (MP), Tagalog's non-canonical word order will be discussed based on the following assumptions: that Tagalog's free word order is an instance of A-bar movement scrambling; that the said movement is not caused by morphology or syntax; that the movement is optional and (following Aldridge, 2004) for antipassives, is a TP-fronting; and that only adjuncts such as PPs and DP_[abs] can be moved in the initial position (or topicalized). The paper will discuss in brief the basic word order of Tagalog following an ergative analysis as done by Aldridge (2004) among others, although the said approach is not being advocated as the best analysis. This is to establish the analysis on scrambling in Tagalog. The data is based on informant work. Informants were asked to judge scrambled sentences through a grammaticality judgment test. Based on the data and results collected, it was found that sentences judged as the most grammatical follow the [V-DP_[agent]-DP_x] pattern, whether the DP_[agent] is an absolutive or ergative. This verifies the basic or canonical word order of Tagalog. Sentences judged less grammatical show ambiguity in its LF interpretation, while others need the morpheme **ay** to fix its ambiguity. Thus, in support of the assumptions claimed, scrambling in Tagalog is an optional movement.*

Tagalog, an Austronesian language spoken in the central part of Luzon and the basis of the national language Filipino, has been typologized as having a free word order, i.e., any arrangement or re-arrangement of words in a sentence has no effect on its linguistic meaning. This is evidenced by the following sentences:

- (1) S-in-und-an ni Aleina ang matanda-ng babae sa Cubao
 follow-ASP-TRAN ERG Aleina ABS old-LNK woman to Cubao
 'Aleina followed the old woman to Cubao'
- (1a) S-in-und-an ni Aleina sa Cubao ang matanda-ng babae
 follow-ASP-TRAN ERG Aleina to Cubao ABS old-LNK woman
 'Aleina followed the old woman to Cubao'
- (1b) S-in-und-an sa Cubao ni Aleina ang matanda-ng babae
 follow-ASP-TRAN to Cubao ERG Aleina ABS old-LNK woman
 'Aleina followed the old woman to Cubao'
- (1c) Sa Cubao s-in-unda-n ni Aleina ang matanda-ng babae
 to Cubao follow-ASP-TRAN ERG Aleina ABS old-LNK woman
 'To Cubao, Aleina followed the old woman'
- (1d) Ang matanda-ng babae sa Cubao, s-in-und-an ni Aleina
 ABS old-LNK woman to Cubao follow-ASP-TRAN ERG Aleina
 'The old woman, to Cubao, Aleina followed/The old woman in
 Cubao, Aleina followed'
- (1e) Ang matanda-ng babae s-in-und-an ni Aleina sa Cubao
 ABS old-LNK woman follow-ASP-TRAN ERG Aleina to Cubao
 'The old woman, Aleina followed to Cubao'

which when glossed in English, will have the same interpretation as 'Aleina followed the old woman to Cubao'. Tagalog can follow any of the following patterns: V-S-O (2-4), S-O-V (5) and V-O-S (1).

- (2) K-um-ain si Muning ng tuyoy
 Eat-INTRAN.ASP ABS Muning OBL dried fish
 'Muning ate a/the dried fish'
- (3) Na-disgrasya si Boris
 INTRAN.ASP-accident ABS Boris
 'Boris met an accident'

- (4) L-um-ipad ang kalapati
 fly- INTRAN.ASP ABS pigeon
 'The pigeon flew'

- (5) Ang bata, tumalon
 ABS child jump-INTRAN.ASP
 'The child jumped'

Movement of certain arguments in a sentence, as seen in sentences (1) to (5), is also called scrambling. In early literature, scrambling is referred to as a syntactic process resulting to the 'reordering' of NPs without disrupting their integrity or results in discontinuing NPs without necessarily moving any phrases (Schäufele, 1991). Scrambling is also found in Japanese and Korean (Miyagawa, 2005; Kim 2003).

- (6) Japanese (Miyagawa, 2005)

- | | | |
|-------------------|-----------|---------|
| a. S | O | V |
| Taroo-ga | piza-o | tabeta |
| Taro-Nom | pizza-Acc | ate |
| b. O | S | V |
| Piza-o | Taroo-ga | tabeta. |
| pizza-Acc | Taro-Nom | ate |
| 'Taro ate pizza.' | | |

- (7) Korean (Kim, 2003)

- | | | |
|--|---------------|----------------|
| a. Mary-ka | ku chayk-ul | sassta |
| Mary-nom | that book-acc | bought |
| 'Mary bought | that book.'0 | (normal order) |
| b. ku chayk-ul | Mary-ka | sassta |
| that book-acc | Mary-nom | bought |
| 'That book, Mary bought.' (scrambled order)0 | | |

Scrambling was first introduced by Ross (1967) and later on taken up by various linguists who investigated languages exhibiting movement such as presented above. Scrambling is said to have two properties (Miyagawa, 2005; Kim, 2003):

- (8) a. Scrambling is a strictly optional movement operation.
 b. Scrambling is semantically vacuous.

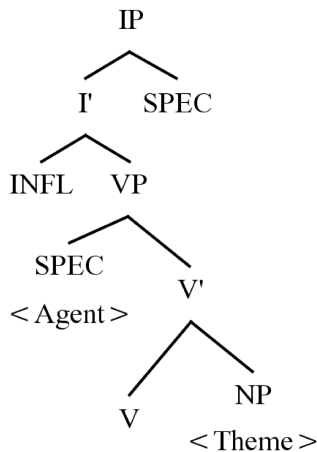
In this paper, we will focus on Tagalog's ability to re-arrange its constituents as presented in sentences (1) to (5). We will discuss Tagalog's non-canonical word order based on the Minimalist Program (MP) and see whether the scrambled constituents are actually allowed in Tagalog syntax or not. We will also discuss whether scrambling in Tagalog is purely optional and whether it is caused by some sort of agreement (between syntax and morphology). Primary data are taken from the author herself being a native speaker of Tagalog. A grammaticality judgment test was also given to other native speakers and users of Tagalog in order to determine which sentence constructions are allowed in the spoken, written, and reading forms.

This paper is divided according to the following sections: section 2 is a discussion of previous studies done on Tagalog word order and scrambling. Section 3 focuses on the discussion of canonical or basic word order of Tagalog. Section 4 will discuss the grammaticality test and relate it to the discussion at hand, section 5 looks at PPs as adjuncts, while evidence in other Philippine and Austronesian languages will comprise section 6. Although this paper will follow Aldridge's (2004) ergative analysis of Tagalog, we are not advocating for an ergative or accusative analysis. We will only use this for the purpose of convenience as we explore the structure of Tagalog.

PREVIOUS STUDIES ON TAGALOG'S WORD ORDER AND SENTENCE STRUCTURE

Guilfoyle, Huang and Travis (1992, herein referred to as GHT), proposed that Tagalog, including Cebuano, Malay/Indonesian and Malagasy, has two subject positions: the [Spec, VP] and the [Spec, IP].

(9) D-Structure of 4 Austronesian languages (GHT 1992)



According to this tree, the [Spec, VP] is where the theta role is assigned while the [Spec, IP] is where the moved NP receives nominative case. Whichever NP stays within the VP and raises depends entirely on the Case-assigning properties of V and INFL. GHT (1992) assume that the verb moves to INFL in all four languages (Malay/Indonesian¹, Malagasy, Cebuano and Tagalog). The variation in Tagalog's word order, as explained by GHT (1992), is because while V raises to INFL, the agent may move to [Spec, IP] to produce the order in (10), otherwise, it can remain in [Spec, VP] to account the order in (11).²

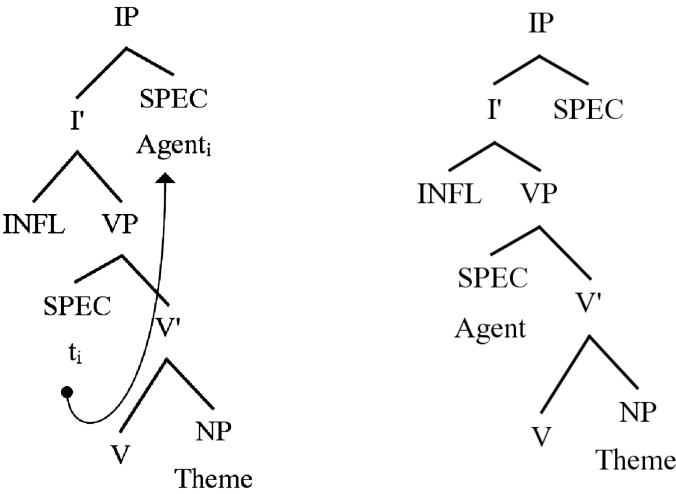
- (10) Mag-aalis ng bigas sa sako para sa bata ang babae
 AT-take out ACC-rice OBL-sac for OBL-child TOP-woman
 'The woman will take rice out of the sack for the child'

- (11) Mag-aalis ang babae ng bigas sa sako para sa bata
 AT-take out TOP-woman ACC-rice OBL-sack for OBL-child
 'The woman will take rice out of the sack for the child'

- (12) Aalisin ng babae sa sako para sa bata ang bigas
TT-take out GEN-woman OBL-sack for OBL-child TOP-rice
'The rice will be taken out of the sack for the child by the woman'

This is further explained through the trees below:

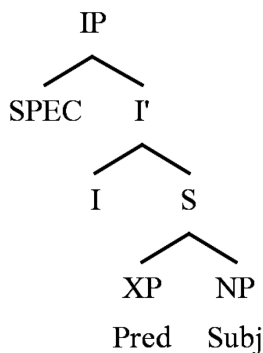
- (13) a. Agent moved to [Spec, IP] b. Agent remaining in [Spec, VP]



The unmarked or canonical word order is shown in sentence (12), where the Topic NP (as used by GHT), moves to the [Spec, IP]. This asymmetry has to do with the relation between the Agent and INFL. INFL (13a) Case-marks SPEC via SPEC-HEAD agreement, while in (13b), INFL governs the [Spec, VP], thus licensing the Agent NP in this position.³

Kroeger (1993) devoted a chapter on Tagalog's phrase structure and configurationality, to find out whether Tagalog is a fixed or free word order language. Kroger proposed that Tagalog has two canonical word orders in active clauses, the VSO and VOS order. He further proposed that Tagalog's phrase structure is:

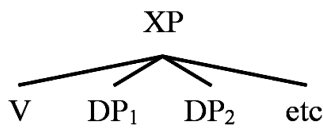
(14)



In discussing Tagalog's phrase structure, Kroger included in his analyses the clitic pronouns. He found that Tagalog is a non-configurational language, because of the following evidence: (a) the objects and other arguments of the verb (V) c-command the subject and, (b) there is no verb phrase (VP) constituent since the verb and its object have no maximal projection because of the clitics' position. Although Tagalog has no VP constituent, it has a strong grammatical relation in syntax. In Kroger's version (14), IP is not identified with S. This S (sentence), sometimes labeled as Small Clauses (SC), is the domain of the predication which includes the subject and the predicate. S is assumed to be the only exocentric category⁴. The verb and all the arguments are sisters to each other. In order for the verb-initial order to occur, the verb raises to I (Infl).

Miller (1988) also has the same analysis as that of Kroeger. Tagalog should be analyzed as a non-configurational language. He raised several points to justify Tagalog's flat-structure: (a) NP-raising, (b) Operator binding, (c) Parallel Constraint Operator Binding, (d) Argument or A-Binding, (e) Control, and (f) Negation. To him, these are tests to check whether a language is configurational or has a hierarchical structure or a flat structure. Based on these facts, he concluded that Tagalog is a non-configurational language.

(15)



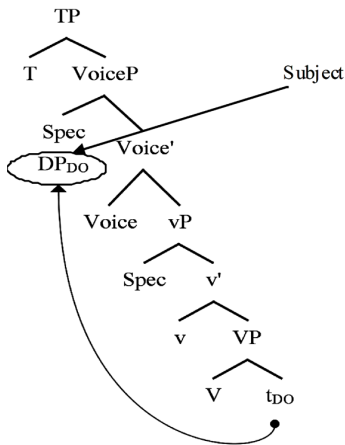
Rackowski (2002) believed that the arguments have a hierarchical structure, and it has a post-merger scrambling causing Tagalog’s flexible word order. However, the chosen subject does not rise up to the [Spec, AGRsP] but only up to the edge of the VoiceP phase (17). When the External Argument (EA) is not the subject of the sentence, it is preferred immediately after the verb while the ang-marked DP is usually preferred to be in the final position.

- (16) Sinulat-Ø ni Juan ang liham
 Asp.write-ACC CS Juan ANG letter
 ‘Juan wrote the letter’

- (17) ?Sinulat ang liham ni Juan
 Asp.write-ACC ANG letter CS Juan
 ‘Juan wrote the letter’

(Rackowski, 2002, citing Kroeger, 1993)

(18)

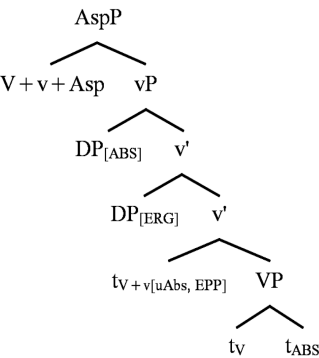


Although Tagalog’s final word order is VSO, Rackowski (2003) assumed that scrambling is the most plausible reason for Tagalog’s surface word order.⁵

Aldridge (2004) proposed that verbs in Tagalog move up to Aspect Phrase (AspP) in order to derive its VSO structure. She further explained that S actually means the semantic subject⁶, whether it is an absolutive or an ergative. Tagalog is a syntactically ergative language, where *v* carries an EPP feature⁷ when it is transitive. The external argument EA is projected at [Spec, vP], while the promoted DP covertly moves to a position higher than the EA in order to check absolutive case. The ergative and the absolutive DPs, after checking case, will remain in-situ or spelled-out at their base position, thus generating the order V-Agent-Patient-X.

- (19) K-in-ain ni Muning ang isda
Eat-TRANS.ASP Erg Muning Abs fish
‘Muning ate the fish’

(20)



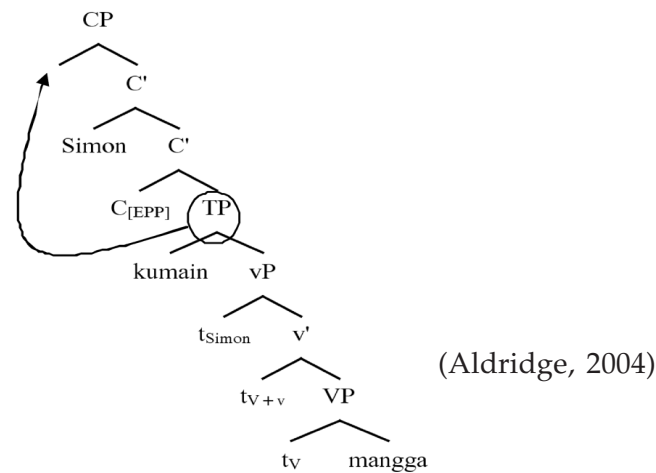
In antipassive sentences such as (21), Adridge proposed TP-fronting. In order to derive sentence (22), DP_[abs] must be extracted or

move out of the AspP to [Spec, C]. The stranded XP will then move to C in order to derive sentence (22).

- (21) K-um-ain si Simon ng mangga
Eat-INTRANS.ASP ABS Simon OBL mango
'Simon ate a mango'

- (22) K-um-ain ng mangga si Simon
Eat-INTRANS.ASP OBL mango ABS Simon
'Simon ate a mango'

(23)



TP-fronting only takes place in Tagalog when the absolutive DP moves out from its base position. This is not an instance of any morphological feature-checking but a consequence of DP-movement to C (Aldridge 2004).

In the next section, I will show the basic sentence structure of Tagalog as a basis in analyzing its ability to scramble or to have flexible word order.

WORD ORDER AND STRUCTURE OF TAGALOG

GHT (1992) analyzed Tagalog to have two subject positions, one in the [Spec, vP] and one in the [Spec, IP]. The subject will move to the [Spec, IP] position in order to check (or receive) the Nominative Case. Rackowski (2002) on the other hand, proposed that the subject in Tagalog moves only up to the edge of the Voice Phrase in order to check case. When the EA (usually the actor or agent), is not “chosen” as subject, it will remain in situ while the subject shifts to the edge of the phase. While Aldridge (2004) proposed that there is no object shift (as opposed to Rackowski, 2002), however, the EA will remain in situ whether chosen as subject or not. In this study, we will follow Aldridge’s analysis of Tagalog, but it should be noted that we are not promoting or advocating for an ergative analysis.⁸

Tagalog has been typologized as an ergative language (De Guzman, 1988; Maclachlan, 1996; Aldridge, 2004). When the clause is transitive⁹, v¹⁰ has an EPP feature causing the internal DP to move to the edge of the vP phase (Aldridge, 2004; Manueli, 2009). This is in accordance with Chomsky’s (2000, 2001) Phase Impenetrability Condition PIC.

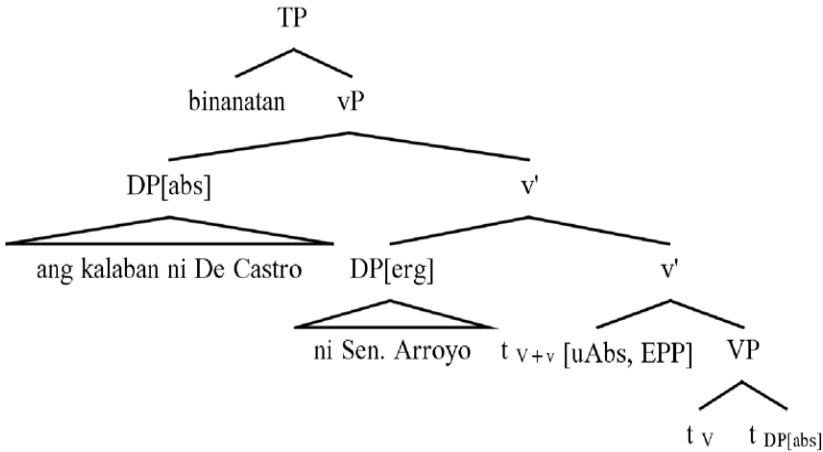
(24) Phase Impenetrability Condition PIC (Chomsky, 2001).

Only the edge of the phase is (vP, CP) accessible to operations.

When v is intransitive, it does not carry an EPP feature, thus the verb is not syntactically active. Case is checked at T with the EA as the highest DP at the edge of the vP phase. Looking at example (25), we see that the verb *binanatan* ‘was attacked’ is a transitive verb courtesy of the affix *-an*. Since v has an EPP feature, it probes down into its arguments in order to find a matching probee. Once it finds its match, an Agree relation has been made, and the goal will move covertly (in the case of Tagalog) to edge of the vP phase. The DP_[erg] is inherently case marked¹¹.

- (25) B-in-anat-an ni Sen. Arroyo ang kalaban ni de Castro
 Attack-ASP.PST-TRAN ERG Sen. Arroyo ABS enemy GEN de Castro
 'Sen. Arroyo attacked de Castro's enemy'

(26)



Looking at sentence (25), we see that the surface order is V-O-S, which contradicts previous claims regarding the typology of Tagalog. However, it should be noted that Tagalog has certain preferences when it comes to $DP_{[abs]}$ and $DP_{[agent]}$.

(i) When $DP_{[agent]}$ is not case-marked with [ABS], it is preferred to be immediately after the verb.

(ii) $DP_{[abs]}$ is mostly preferred in the final position (Verb- $DP_{[agent]}$ - $DP_{[abs]}$)

Although the subject is in the final position, at LF, the subject moves covertly to [Spec, vP] in order to check the [uCase] feature [ABS]. Remember that when v is transitive, it has an [EPP] feature causing one of the DPs to move to the edge of the vP phase to have its features checked. Otherwise, the numeration will crash (Aldridge, 2004; Manuelli, 2009). Thus, the order VSO is still maintained.

Dryer (2007) proposed three criteria in determining the basic word order of a language:

- (27) Criteria for determining basic word order
 - a. Frequency of use
 - b. Restriction on distribution
 - c. Pragmatics

These criteria can be used to determine Tagalog’s basic and unmarked word order, and thus, were followed in this paper. We assume that the basic word order in Tagalog is as shown in sentence (25) with the graphic representation as in (26). The basic affixes following this structure are as follows:

Basic transitive (Trans)	-in- ¹
Instrument/Benefactive (IT/BT)	i-
Locative (LT)	-an
Antipassive/Intransitive (Intrans)	-um-, mag-, etc.

Table 1: Basic Affixes in Tagalog (Manueli, 2009; Aldridge, 2004)

Other affixes found and used in Tagalog (as listed below) mostly follow the canonical order [V – DP_[agent] – DP_[others]] in most Tagalog sentences¹².

- Goal Voice Affixes
- a) -in- (internal)
 - b) ma- (abilitative)
 - c) ma- (accidental)
 - d) ipag- (external)
 - e) i- (internal)
 - f) mai- (abilitative)

- g) -an (internal)
- h) ma- -an (abilitative)

Locative Voice Affixes

- a) -an (external)
- b) ma- -an (external, abilitative)

Instrumental Voice Affixes

- a) ipag- (external)
- b) ipang- (habitual)
- c) maipag- (external, abilitative)
- d) maipang- (habitual, abilitative)

Hence, sentences such as below are deemed to follow the canonical word order VSO:

- (28)

k-in-ain
eat-ASP.PST.TRANS
'Muning ate the fish'

ni Muning
ERG/GEN Muning

ang isda
ABS fish
- (29)

Nag-luto
ASP.PST.INTRANS-cook
'Amy cooked pansit in the kitchen'

si Amy
ABS Amy

ng pansit
DAT/OBL pansit

sa kusina
LOC kitchen
- (30)

L-um-angoy
swim-ASP.PST.INTRANS
'The dog swam in the river'

ang aso
ABS dog

sa ilog
LOC river

and sentences such as (31) to (33) are be interpreted to be ambiguous or ungrammatical.

- (31)

?k-in-ain
eat-ASP.PST.TRANS
'Muning ate the fish'

ang isda
ABS fish

ni Muning
ERG/GEN Muning
- (32)

? k-in-agat
bite-ASP.PST.TRANS
'The dog bit the child'

ang bata
ABS child

ng aso
ERG/GEN dog

- (33) ? i-ni-lubog ang isda ni Dominic sa mantika
 TRANS-ASP.PST-dip ABS fish ERG/GEN Dominic LOC oil
 'Dominic dipped the fish into the oil'

If the DP_[abs] in these sentences moves overtly, the resultant meaning becomes ambiguous which can cause the crashing of the numeration. In order to avoid this, it remains in situ since all its features have been checked via Agree relation between v and the DP in question. Kanarek (2005a) also did a study on Tagalog's word order and found that sentences such as the ones mentioned are judged ungrammatical by other speakers of Tagalog.

The restriction on DPs is more obvious on pronominals. However, it should be remembered that pronominals have their own restrictions.

- (34) K-ina-in ko ang saging
 eat-ASP.PST.TRANS ERG.1st ABS banana
- (35) ?K-in-ain ang saging ko
 eat-ASP.PST.TRANS ABS banana GEN.1st
 'I ate the banana'
- (36) K-um-ain ako ng saging
 eat-ASP.PST.INTRANS ABS.1st DAT/OBL banana
- (37) *k-um-ain ng saging ako
 eat-ASP.PST.INTRANS DAT/OBL banana ABS.1st
 'Literally: Eat the banana I/I ate a/the banana'
 'I ate a/the banana'
- (38) ako, k-um-ain ng saging
 ABS.1st eat-ASP.PST.INTRANS DAT/OBL banana
 'I ate a/the banana'

The only allowed movement in this case is the fronting of the pronominal DP_[abs]. Observe further examples.

- (39) Um-inom siya ng kape sa Starbucks
 ASP.PST.INTRANS-drink ABS.2nd DAT/OBL coffee LOC Starbucks

- (38a) *Uminom ng kape siya sa Starbucks
(Lit.) ‘Drank coffee s/he at Starbucks’
- (38b) *Uminom sa Starbucks siya ng kape
(Lit.) ‘Drank at Starbucks s/he coffee’
- (38c) Sa Starbucks siya uminom ng kape
(Lit.) ‘At Starbucks, s/he drank coffee’
- (38d) Sa Starbucks, uminom siya ng kape
(Lit.) ‘At Starbucks, drank s/he coffee’
‘S/he drank coffee at Starbucks’
- (40)
- | | | |
|--------------------|---------|---------|
| S-in-ipa | ko | siya |
| kick.ASP.PST.TRANS | ERG.1st | ABS.2nd |
- (39a) *Sinipa siya ko
(Lit.) ‘Kicked S/he I’
- (39b) Siya, sinipa ko
(Lit.) S/he kicked I
- (39c) *ko sinipa siya
(Lit.) ‘I kicked s/he’
‘I kicked him’

The pronominal with the semantic (to others, theta) role actor should always be second position, whether the topicalized element is a DP or a PP, or even if the sentence is in its unmarked form (verb-initial). Since such restrictions in Tagalog exist, we can initially say that Tagalog is not “really” a free word order language. Languages such as Latin, Hungarian, and German are free word order languages because the DPs are case marked accordingly. There is not much ambiguity in its sentences whenever elements in the sentence move. The markers in these languages are overtly case marked, thus easily identifiable and understood. In Tagalog, although there is an overt marker, structural and semantic ambiguities arise because of the function words being portmanteaus. For example, the marker *ng* can either be a genitive marker, an ergative marker, or a possessive marker, thus resulting in ambiguity.

Therefore, questions such as (a) is Tagalog a free word order language; and (b) is movement feature driven or optional, will be discussed in the next section.

GRAMMATICALITY JUDGMENT TEST

Although usually given to second language learners to determine the acquisition of language, in this paper, a grammaticality judgment test was given to 11 native speakers and users of Tagalog.¹³ The purpose of the test was to determine whether the native speakers and users of Tagalog would allow certain movements and deem it grammatical. A test of 45 sentences¹⁴ using the affixes *-um-*, *-in-* and *-an* was used. The DPs and PPs in the three basic sentences were scrambled in all possible ways. The results are shown in Table 2.

(41) Kumakain ng isda si Muning

(42) Kinakain ni Muning ang isda

(43) Kumakain ng isda si Muning
'Muning is eating fish'

As predicted, sentences (1), (7), and (37), repeated here as (41–43), were the most grammatical of all the sentences. This is because these sentences are the unmarked or the basic sentences. Sentences (4, 5, 6, 11, 12, 21, 23, 24, 25, 26, 32, and 40) were judged ungrammatical because these sentences are really ungrammatical. However, there were sentences in the list that should have been judged ungrammatical but instead one of the informants deemed it less grammatical. These sentences were (19, 20, 22, 27, 30, 41, and 42). The informant did not explain why these sentences were found to be less grammatical. Tables 3 and 4 shows the the grammatical and ungrammatical. In Table 5 are the sentences deemed less grammatical.

These sentences were judged less grammatical because they did not follow the canonical word order. For example, sentences (3, 31, and 39) are examples of Topicalization (or fronting). Sentences (8, 15, 16, 17, and 18) are the so-called ambiguous ones. However, sentence (33) should have been judged ungrammatical because it totally violated

Table 2: Crosstabulation of Grammaticality Judgment Test.

Sentence * Grammaticality Crosstabulation				
Count				
	Grammaticality			Total
	Grammatical	Less Grammatical	Ungrammatical	
S1	11	0	0	11
S10	1	1	9	11
S11	0	0	11	11
S12	0	0	11	11
S13	7	0	4	11
S14	10	0	1	11
S15	5	3	3	11
S16	6	4	1	11
S17	6	3	2	11
S18	4	5	2	11
S19	0	1	10	11
S2	8	3	0	11
S20	0	1	10	11
S21	0	0	11	11
S22	0	1	10	11
S23	0	0	11	11
S24	0	0	11	11
S25	0	0	11	11
S26	0	0	11	11
S27	0	1	10	11
S28	0	1	10	11
S29	0	1	9	10
S3	6	5	0	11
S30	0	1	9	10
S31	4	5	2	11
S32	2	6	3	11
S33	1	4	6	11
S34	0	1	10	11
S35	0	2	9	11
S36	1	1	9	11
S37	11	0	0	11
S38	10	1	0	11
S39	8	3	0	11
S4	0	0	11	11
S40	0	0	11	11
S41	0	1	10	11
S42	0	1	10	11
S43	10	0	0	10
S44	8	1	1	10
S45	7	2	0	9
S5	0	0	11	11
S6	0	0	11	11
S7	11	0	0	11
S8	7	3	1	11
S9	8	2	0	10
Total	152	64	272	488

Table 3: Results of Grammatical Sentences.

Sentences	grammatical	less grammatical	ungrammatical	
S7	11	0	0	11
S37	11	0	0	11
S1	11	0	0	11
S43	10	0	0	10
S38	10	1	0	11
S14	10	0	1	11
S9	8	2	0	10
S44	8	1	1	10
S39	8	3	0	11
S2	8	3	0	11
S8	7	3	1	11
S45	7	2	0	9
S13	7	0	4	11
S3	6	5	0	11
S17	6	3	2	11
S16	6	4	1	11
S15	5	3	3	11
S31	4	5	2	11
S18	4	5	2	11
S32	2	6	3	11
S36	1	1	9	11
S33	1	4	6	11
S10	1	1	9	11

Table 4: Results of Ungrammatical Sentences.

Sentences	grammatical	less grammatical	ungrammatical	
S6	0	0	11	11
S5	0	0	11	11
S40	0	0	11	11
S4	0	0	11	11
S26	0	0	11	11
S25	0	0	11	11
S24	0	0	11	11
S23	0	0	11	11
S21	0	0	11	11
S12	0	0	11	11
S11	0	0	11	11
S42	0	1	10	11
S41	0	1	10	11
S34	0	1	10	11
S28	0	1	10	11
S27	0	1	10	11
S22	0	1	10	11
S20	0	1	10	11
S19	0	1	10	11
S36	1	1	9	11
S10	1	1	9	11
S35	0	2	9	11
S30	0	1	9	10
S29	0	1	9	10
S33	1	4	6	11
S13	7	0	4	11
S15	5	3	3	11
S32	2	6	3	11
S17	6	3	2	11
S31	4	5	2	11
S18	4	5	2	11
S14	10	0	1	11
S44	8	1	1	10
S8	7	3	1	11
S16	6	4	1	11

Table 5: Results of Less Grammatical Sentences.

Sentence	Grammatical	Less Grammatical	Ungrammatical	Total
S32	2	6	3	11
S31	4	5	2	11
S3	6	5	0	11
S18	4	5	2	11
S33	1	4	6	11
S16	6	4	1	11
S8	7	3	1	11
S39	8	3	0	11
S2	8	3	0	11
S17	6	3	2	11
S15	5	3	3	11

Tagalog’s syntax but instead was only judged less grammatical by four of the informants.

Further explanations for sentences (3, 31, and 39) from some of the informants explained that these less grammatical sentences lack the *ay* morpheme when parts of the sentences were preposed. Thus, the morpheme *ay* should be added, as seen from the example below:

(44) Sentence 3:

Si Muning k-um-a-kain ng isda
ABS Muning ASP.PROG-INTRANS-eat DAT/OBL fish
‘Muning is eating fish’

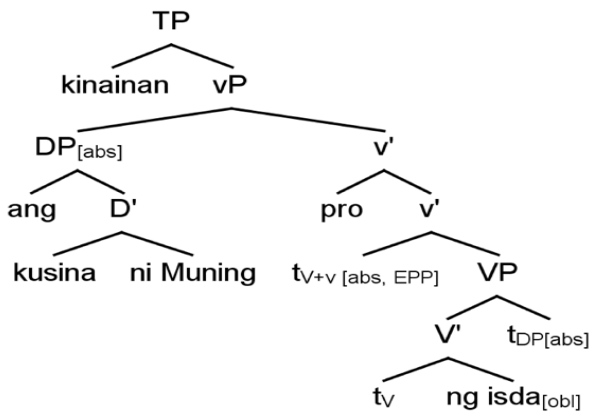
(45) Si Muning ay kumakain ng isda
ABS Muning *ay* ASP.PROG-INTRANS-eat DAT/OBLfish
‘Muning is eating fish’

As for the rest of the sentences judged less grammatical, the informants found these sentences ambiguous. The DP_[actor] marked with *ni* or *ng* when placed after the DP_[abs]' can also have the meaning of possession, which can be shown structurally as:

- (46) Kinainan ang kusina ni Muning
eat-ASP.PST-LOC.TRANS ABS kitchen ERG/POSS Muning

ng isda.
DAT/OBLfish
'Someone is eating fish in Muning's kitchen'

- (47)

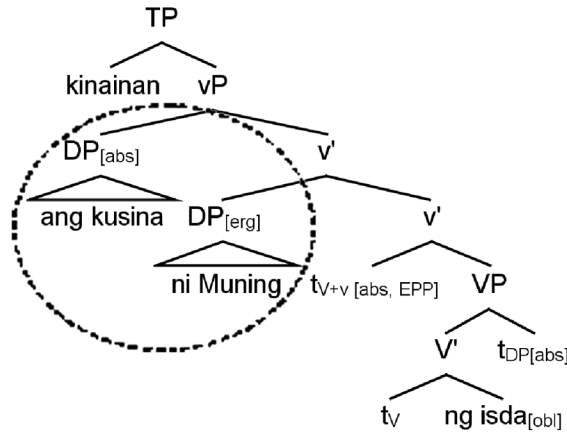


Thus, if we are referring to the meaning 'Muning is eating fish in the kitchen', the numeration should have been as (48):

- (48) Kinainan ni Muning ng isda
eat-ASP.PST-LOC.TRANS ERG/POSS Muning DAT/OBLfish

ang kusina
ABS kitchen
'Muning is eating fish in the kitchen'

(49)



Hence, if the DP_[abs] will move overtly to [SPEC, vP], ambiguity will arise. That is why DP_[abs] remains in-situ after its features have been checked. Majority of the sentences used in the test as well as in this paper have the pattern [V – DP_[agent] – DP/PP], although there are instances where the DP following the verb is not a DP_[agent], but a DP_[theme] or DP_[patient]. This is only the case when there is no DP_[agent] in the sentence or the sentence is an antipassive, an unergative or an unaccusative.¹⁵

Antipassives such as sentence (2) (repeated here as 50) in the other analyses of Tagalog are taken as the canonical or basic structure (Kroeger, 1993; Schachter & Otones, 1972; Constantino, 1969, 1972). It has been the basis of most nominative-accusative analyses of Tagalog. Constantino, for instance, analyzed (51) as the transformation of (50).¹⁶

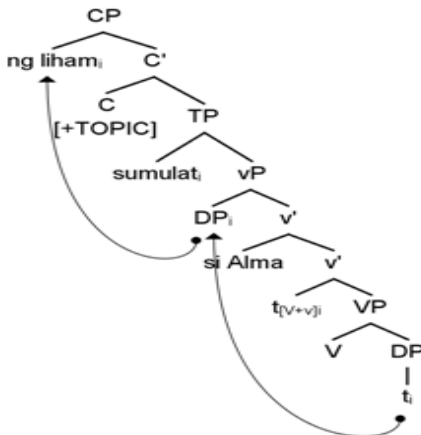
- | | | | |
|------|-------------------------|------------|--------------|
| (50) | k-um-a-kain | si Muning | ng isda |
| | ASP.PROG-INTRANS-eat | ABS Muning | DAT/OBL fish |
| | 'Muning is eating fish' | | |

- (51) k-um-a-kain ng isda si Muning
ASP.PROG-INTRANS-eat DAT/OBL fish ABS Muning
'Muning is eating fish'

Kroeger (1993) on the other hand, assumed that both the VOS and VSO orders are the canonical word orders or the unmarked word orders in Tagalog. Since we have proposed that DP_[abs] in section 3 is preferred in the final position, while DP[agent] is in the second position, antipassives can have either of the construction in (50) and (51). In order to rationalize (51), Aldridge (2004) proposed that it has undergone TP-fronting. The oblique DP [ng isda] does not move to the left of the DP_[abs] by undergoing scrambling or object shift since there is no motivation to move it higher than the absolutive DP. Also, if the oblique DP will be at the edge of the vP phase, it can get attracted to the features in C, thus moving it to the leftmost of the verb which can crash the numeration.

- (52) S-um-ulat ng liham si Simon
write-ASP.PST-INTRAN DAT/OBLI letter ABS Simon
'Simon wrote a letter'

- (53) *Ng liham sumulat si Simon
 DAT/OBLI letter write-ASP.PST-INTRAN ABS Simon
 ‘Simon wrote a letter’



Keeping in mind the restrictions on extraction, only absolutes can be extracted out of TP. [ng liham] is an oblique DP; therefore it should not and cannot be extracted. However because of PIC, the most suitable candidate for a possible feature in C is the edge of the vP phase, thus ‘extracting’ this DP out of its phase in order to satisfy the feature required.

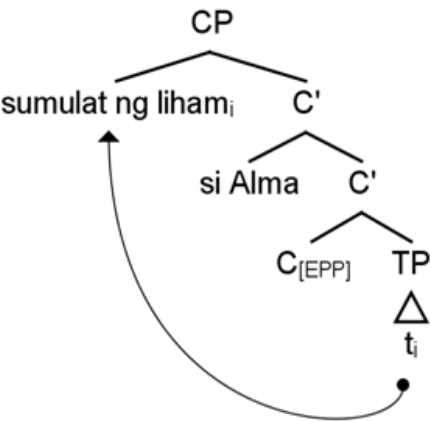
The rule:

(55) **Stranded DP Constraint** (Aldridge, 2004)

A DP cannot be spelled out in the leftmost position in a phase edge.

was formulated in order to rule out constructions such as (53) as well as ambiguous sentences as seen from the group of less grammatical sentences. The so-called movement of [ng liham] in sentence (52) is not driven by any morphological feature-checking condition. Sentence (52) is an instance of TP-fronting where the DP[abs] is extracted and moved to [Spec, C] and the remnant TP then moves to the outer most position of C in order to satisfy the verb initial order of Tagalog.

(56)



As Aldridge (2004) puts it, “predicate-fronting is rather a consequence of DP-movement to the C domain” (p. 256). Hence, the

movement of certain DPs, TPs and PPs in Tagalog is not caused by any morphological feature-checking but (a) a probable consequence of the movement of the DP_[abs] out of its base position in the case of antipassives, and (b) by topicalization.

EVIDENCE FROM OTHER PHILIPPINE LANGUAGES: KINARAY-A, KUYUNON AND CEBUANO

Like Tagalog, Kinaray-a, Kuyunon and Cebuano are VSO languages as well. This means that these languages also follow free word ordering. However, there is also restriction in these languages following Dryer's word order criteria (2007).

- (57) Tagalog
Na-i-tapon niya ng basura
ASP.PST.TRANS-APPL.TRANS-throw ERG.3rd ABS garbage

sa ilog
LOC river
'S/he was able to throw the garbage in the river'
- (58) Kinaray-a
Na-tablud na ang basura sa suba
ASP.PST.TRANS.APPL-throw ERG.3rd ABS garbage LOC river
'S/he was able to throw the garbage in the river'
- (59) Kuyunon
Na-pilak na ang basura sa suba
ASP.PST.TRANS.APPL-throw ERG.3rd ABS garbage LOC river
'S/he was able to throw the garbage in the river'
- (60) Cebuano
Na-labay niya ang basura sa suba
ASP.PST.TRNS.APPL-throw ERG.3rd ABS garbage LOC river
'S/he was able to throw the garbage in the river'

In Kinaray-a, Kuyunon and Cebuano, the DP_[location] *sa suba* can be fronted through adjunction.

- There is ambiguity and ungrammaticality¹⁷ if the DP following the verb is not an actor/agent:

- (64) Kinaray-a
 ?na-tablud ang basura na
 ASP.PST.TRANS.APPL-throw ABS garbage ERG/GEN.3rd
 sa suba
 LOC river
 'S/he was able to throw the garbage in the river'
 'His/her garbage was thrown in the river'
- (65) Kuyunon
 *na-pilak ang basura na
 ASP.PST.TRANS.APPL-throw ABS garbage ERG/GEN.3rd
 sa suba
 LOC river
 'Throw the garbage, s/he was able to throw in the river'
- (66) Cebuano
 ?Na-labay ang basura niya sa suba
 ASP.PST.TRNS.APPL-throw ABS garbage ERG.3rd LOC river
 'Throw the garbage, s/he was able to throw in the river'
 'S/he was able to throw the garbage in the river'
 'His/her garbage was thrown in the river'

A PRELIMINARY LOOK AT PPS AS ADJUNCTS

In this paper, I consider PPs as adjuncts in most Tagalog sentences. Certain verbs in Tagalog use PPs as their complements for instance the verb *punta*.

- (67) P-um-unta si Simon sa laboratoryo.
 ASP.PST-INTRANS-go ABS Simon LOC laboratory
 'Simon went to the laboratory'

If the PP is absent, the numeration will crash.

- (68) *P-um-unta si Simon
 ASP.PST-INTRANS-go ABS Simon
 'Simon went (to)'

But in the case of the majority of Tagalog verbs, PPs are adjuncts. However, PPs can be scrambled in many possible ways.

- (69) L-in-uto ni Simon ang gulay
 cook-ASP.PST-TRANS ERG Simon ABS vegetable
 sa kusina
 LOC kitchen
 'Simon cooked the vegetables in the kitchen'

- (70) Sa kusina l-in-uto ni Simon ang gulay
 LOC kitchen cook-ASP.PST-TRANS ERG Simon ABS vegetable
 'In the kitchen, Simon cooked the vegetables'

- (71) L-in-uto ni Simon sa kusina ang gulay.
 cook-ASP.PST-TRANS ERG Simon LOC kitchen ABS vegetable
 'Simon cooked the vegetables in the kitchen'

- (72) ?L-in-uto sa kusina ni Simon ang gulay.
 cook-ASP.PST-TRANS LOC kitchen ERG Simon ABS vegetable
 (a) ?'Simon cooked the vegetables in the kitchen'
 (b) 'The vegetables were cooked in Simon's kitchen'

- (73) Naglaba si Maria sa ilog.
 ASP.PSR-INTRANS ABS Maria LOC river
 'Maria washed (clothes) in the river'

- (74) Sa ilog naglaba si Maria.
 LOC river ASP.PSR-INTRANS ABS Maria
 'Maria washed (clothes) in the river'

- (75) Naglaba sa ilog si Maria.
 ASP.PSR-INTRANS LOC river ABS Maria
 'Maria washed (clothes) in the river'

The PPs in sentences (69) to (75), except (72), are all adjuncts. These PPs can be scrambled without any morphological or syntactic feature-checking condition. However, in the case of (72), when the PP is moved in between the verb and the DP_[agent] of a basic transitive sentence, the LF interpretation might be (b).

FINAL REMARKS: SYNTAX/SEMANTICS INTERFACE

Based on the data and results obtained from the grammaticality judgment test, we saw that the preferred order is [V-DP_[agent]-DP_[x]-X] whether the DP_[agent] is absolutive or ergative. Sentences such as

- (76) Ka-ra-rating ko lang
 PresentPerfect-redup-arrive ERG.1st only
 'I just arrived'

do not have any grammatical subject marked with ang in order to determine its grammaticality. This sentence is a perfectly well-formed sentence in Tagalog. Scrambling in Tagalog is optional; DP_[abs] and PPs can be fronted or moved to [Spec, C] since first, only absolutives are extracted out of its base position, and second, PPs are not within the domain of VP thus it can be moved anywhere except in between V and DP_[agent].

Aside from this, the second position in a verbal sentence does not always mean the subject position. This second position is actually occupied by the DP_[agent], whether it is an absolutive or an ergative. When the DP is marked absolutive, it remains in-situ. It only moves to the edge of the vP phase covertly and when v has an EPP feature.

Although we did not probe deeper whether Tagalog is really a VSO or a VOS language, we take this S as the semantic subject, the DP_[agent] whether it is absolutive or ergative. S, more generally, is the grammatical subject marked with *ang* and usually with the feature [ABS]. Tagalog has a flexible word order only when the DP_[agent] is not compromised. Only absolutive DPs and adjunct PPs can be ordered freely. Non-absolutive DPs must remain in situ or should be right after the verb.

LF and PF should go hand-in-hand in determining whether the derivation will lead to proper semantic interpretation. Otherwise, before SPELL-OUT, it should block an uninterpretable derivation to avoid ambiguity. Movement of elements, in this case, the DPs and adjunct PPs in Tagalog, are all optional. An element is moved only to emphasize its significance; otherwise, native speakers and user of Tagalog will still choose to use the canonical or basic word order.

Notes

1. As for Malay/Indonesian, it was only assumed.
2. Sentences adapted from GHT (1992).
3. Please see GHT (1992) as well as Guilfoyle (1988) for further explanation.
4. The only category not determined by head of the element (Kroeger, 1993).
5. Rackowski noted that she did not focus on word order in her research but only noted Tagalog's ability to scramble its constituents.
6. What Aldridge meant by semantic subject is the external argument in the [Spec, vP], usually the agent.
7. In P&P's terms, it means Extended Projection Principle. In MP's terms, it is a functional feature of D or N licensing a DP occupying the [Spec, IP] position (Hornstein, Nuñez, & Grohmann, 2004) or to move to the edge of the phase, per Chomsky (2000, 2001). Please see Aldridge (2004) for its application on Seediq, Tagalog, Malay and Malagasy.
8. I find it suitable to use Aldridge's analysis, as in our opinion, it more or less described Tagalog syntax more clearly.
9. Here, I assume the following affixes in Tagalog as basic: basic transitive -in- and -an, applicative instrument/benefactive i-, applicative locative -an, and antipassive/intransitive -um-, mag-, ma-, etc.
10. In other studies on Tagalog, the verb carries a voice affix where agreement between the verb's arguments and the verb takes place. In other literatures, it is

also called focus. We will not use that terminology in this paper since we are looking at Tagalog's word order.

11. Here, we assume that the ergative case is inherently case marked by *v* (Aldridge, 2004).

12. The labels are based on Cruz's (1975) subcategorization of Tagalog verbs. Please see footnote 3 for the basic affixes used in this study.

13. Their ethnicities were not identified in the questionnaire.

14. See appendix for the test used.

15. Please refer to Aldridge (2004), Manuelli (2009), and Adger (2003).

16. Readers are referred to his complete works (see reference section).

17. To some native speakers of these languages.

18. Applicatives are verbal affixes that license the verbs' additional arguments. See Pylkkänen (2000), Rackowski (2002), Aldridge (2004) and Manuelli (2009) for further explanation.

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APPENDIX

Grammaticality Test

I would like to ask your opinion about the following sentences grammatical or ungrammatical.

Please rate the sentences if these are grammatical or not.

Sentences		1	2	3
		Grammatical	Less Grammatical	Ungrammatical
1.1.	Kumakain ng isda si Muring	☐	☐	☐
1.2.	Kumakain si Muring ng isda	☐	☐	☐
1.3.	Si Muring, kumakain ng isda	☐	☐	☐
1.4.	Si Muring, ng isda kumakain	☐	☐	☐
1.5.	Ng isda, si Muring kumakain	☐	☐	☐
1.6.	Ng isda, kumakain si Muring	☐	☐	☐
1.7.	Kinakain ni Muring ang isda	☐	☐	☐
1.8.	Kinakain ang isda ni Muring	☐	☐	☐
1.9.	Ang isda, kinakain ni Muring	☐	☐	☐
1.10.	Ang isda, ni Muring kinakain	☐	☐	☐
1.11.	ni Muring, kinakain ang isda	☐	☐	☐
1.12.	ni Muring, ang isda kinakain	☐	☐	☐
1.13.	Kinainan ni Muring ang kusina ng isda	☐	☐	☐
1.14.	Kinainan ni Muring ng isda ang kusina	☐	☐	☐
1.15.	Kinainan ang kusina ng isda ni Muring	☐	☐	☐
1.16.	Kinainan ang kusina ni Muring ng isda	☐	☐	☐
1.17.	Kinainan ng isda ni Muring ang kusina	☐	☐	☐
1.18.	Kinainan ng isda ang kusina ni Muring	☐	☐	☐
1.19.	ni Muring, kinainan ang kusina ng isda	☐	☐	☐
1.20.	ni Muring, kinainan ng isda ang kusina	☐	☐	☐
1.21.	ni Muring, ang kusina ng isda kinainan	☐	☐	☐
1.22.	ni Muring, ang kusina kinainan ng isda	☐	☐	☐
1.23.	ni Muring, ng isda ang kusina kinainan	☐	☐	☐
1.24.	ni Muring, ng isda kinainan ang kusina	☐	☐	☐
1.25.	ng isda ni Muring kinainan ang kusina	☐	☐	☐
1.26.	ng isda ni Muring ang kusina kinainan	☐	☐	☐
1.27.	ng isda kinainan ang kusina ni Muring	☐	☐	☐
1.28.	ng isda kinainan ni Muring ang kusina	☐	☐	☐
1.29.	ng isda ang kusina kinainan ni Muring	☐	☐	☐
1.30.	ng isda ang kusina ni Muring kinainan	☐	☐	☐
1.31.	ang kusina kinainan ni Muring ng isda	☐	☐	☐
1.32.	ang kusina kinainan ng isda ni Muring	☐	☐	☐
1.33.	ang kusina ni Muring kinainan ng isda	☐	☐	☐
1.34.	ang kusina ni Muring ng isda kinainan	☐	☐	☐
1.35.	ang kusina ng isda kinainan ni Muring	☐	☐	☐
1.36.	ang kusina ng isda ni Muring kinainan	☐	☐	☐
1.37.	Kumakain ng isda si Muring	☐	☐	☐
1.38.	Kumakain si Muring ng isda	☐	☐	☐
1.39.	Si Muring, kumakain ng isda	☐	☐	☐
1.40.	Si Muring, ng isda kumakain	☐	☐	☐
1.41.	Ng isda, si Muring kumakain	☐	☐	☐
1.42.	Ng isda, kumakain si Muring	☐	☐	☐
1.43.	Kinakain ni Muring ang isda	☐	☐	☐
1.44.	Kinakain ang isda ni Muring	☐	☐	☐
1.45.	Ang isda, kinakain ni Muring	☐	☐	☐