2021

Comparative Ergative and Accusative Structures in Three Philippine Languages

Rodney C. Jubilado

Abstract

Cebuano, Filipino, and Isamal are classified as Austronesian languages that are spoken in the Philippines. This paper deals with the comparative ergative and accusative structures of the aforementioned languages with focus on the syntactic relations and processes. The varieties of these languages are the ones used in Samal Island, Davao, Philippines. Aimed at the structural configurations, the verb phrase (VP) and the tense phrase (TP) are analytically scrutinized as the cartographic projections of the lexical information encoded in the argument structures and the thematic structures of the verbs. With the employment of the Minimalist Program in the analysis, the computation includes the movement, checking of features, and assignment of theta roles within the structures of the three languages. Findings include the (1) similarity of structural relations and processes in the VP and the TP of the three languages, (2) movement of the verb from the VP to the TP, and (3) merger of the verb complements occur in the VP that ensures the local assignment of theta roles and the checking of cases.

Keywords: ergative, accusative, Minimalist Program, Isamal, Cebuano

Author information:

Rodney C. Jubilado
rodneycj@hawaii.edu
orcid.org/0000-0003-4070-8102

Chair, Division of Humanities,
University of Hawaii at Hilo
Hawaii, United States of America

All indigenous languages in the Philippines belong to the Austronesian family of languages that constitute the Philippine-type of languages that have the Verb-Subject-Object (VSO) pattern. Even though these languages belong to the same language family, they are not mutually intelligible. Typologically, these languages are classified as agglutinative languages, a type of language that has complex morphology that is characterized by the use of many affixes. The verb morphology of these languages shows that each of the verbal affixes represents grammatical and semantic categories. When any of these verbal affixes is affixed to the verb stem, the resultant verb specifies the kind of complements this verb takes as expressed by the argument/thematic structure of the verb. Syntactically, when the predicate is composed of a VP, any of the complements can function as the subject-complement or the non-subject-complement of the verb depending on the number of arguments in the lexical information.

Various studies have been done on the Philippine languages both by local and international linguists. Significant to this paper are those that have included the studies on the licensing of the arguments, semantic relations, case categories or case forms in languages that are found in the literature (Tanangkingsing, 2015, 2007; Dita, 2011, 2010; Nagaya, 2007, 2005; Kitano, 2005; Nolasco & Saclot, 2005; Liao, 2004; Reid & Liao, 2004; Mithun, 1994). In the many scholarly works on the Philippine languages, Tagalog is the most studied language.

With the employment of the generative school of thought in linguistics, the works of Aldridge (2012; 2000) on Tagalog is used in the study especially on the ergatives. Another article, Rackowski and Richards (2005), deals with the phase edge and extraction in languages including Tagalog wherein the verb morphology signals movement of argument, and the external argument occupies the [Spec, vP] position. Another research on Tagalog is that of Rackowski (2002) where the major structural topics like aspect, verb morphology, argument structure, and semantic relations are given focus.

Objectives

The overarching aim of this paper is the comparative analysis of the structures of Philippine languages, namely, Isamal, Cebuano, and Filipino. To accomplish this aim, this study has the following specific objectives:

1. To provide an analysis on the ergative and the accusative verbs of Filipino, Cebuano, and Isamal languages.
2. To explicate the syntactic processes and relations in the VP and TP structures of Filipino, Cebuano, and Isamal languages.

Theoretical Background: The Minimalist Program

This paper makes use of the Minimalist Program in analyzing the verb types of Cebuano, Filipino, and Isamal by highlighting the lexical information of the predicates and the derivation of the structural descriptions projected by the predicates. The Minimalist Program (Chomsky, 2013; 2008; 2007; 2005; 2004; 2001; 2000; 1995) is a theoretical framework within the generative school of thought in linguistics that aims at the explanation of the knowledge of language and the acquisition thereof in line with the Universal Grammar (UG). Assuming the Strong Lexicalist Hypothesis, deriving the structural description is done in the bottom-up fashion, which means that the lower structures are computed first before the higher structures. This covers the argument/thematic structures of the verbs and the syntactic structures projected by the lexical items. Traditionally, the entire class of monadic or monoargumental verbs is called intransitive verbs, but in the advent of the Unaccusative Hypothesis[1] and the Burzio's Generalization[2] , the ergative or unaccusative verbs are given the intense scrutiny in various syntactic researches and typological studies in generative linguistics. This paper analyzes the lexical information of the verb types and the implication on the clausal structures of Cebuano, Filipino, and Isamal. This paper entails Nominal Phrase (NP) movement and all syntactic processes, where NP also meant Determiner Phrase (DP) (Carnie, 2007). Thus, the model of grammar in MP is enhanced and represented below.

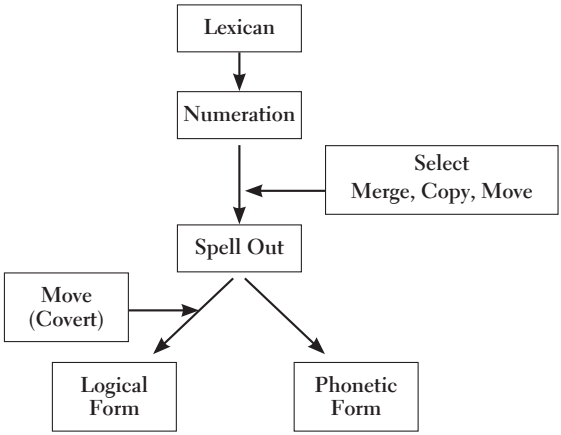

Figure 1. The Grammar in MP

1 Unaccusative Hypothesis was proposed by David Perlmutter (1978, p.160) categorizing the traditional intransitive verbs in to two types, namely, unaccusative and unergative. In this hypothesis, unaccusative verbs select only one internal argument which is the logical object theme. The unergative verbs select only one external argument which is the grammatical subject, which can be either an agent or an experiencer depending on the lexical semantics of the lexical verb.

2 Burzio's Generalization stipulates that verbs that can theta-mark its external argument can also assign accusative case (Burzio, 1986, pp. 178-179). It conceptualizes the structural facts that the subjects in the unaccusative constructions behave syntactically like the object themes of the transitive constructions.

In the Minimalist Program, the language faculty consists two parts: (1) the lexicon and (2) the computational system (CS). The separation of lexicon and CS substantiates the elimination of the redundancy that the Phrase Structure Rules (PSR) and lexical properties possess. Such separation resolves the tension between explanatory and descriptive adequacy. The lexicon specifies the lexical item to enter into the CS minus redundancy which can be predicted in the UG. The lexicon is composed of lexical items which are classified as lexical categories and functional categories. Lexical categories are contentives or substantives like N, V, A, ADV, and P owing to the fact that they possess idiosyncratic descriptive content or sense properties. Functional categories are functors like tense, pronouns, determiners, auxiliaries, complementizers, infinitivals, and others. These functors have essential grammatical functions which bear information about the grammatical properties of expressions within the sentence (Radford, 1997, p. 45). In the lexicon, the lexical entry contains information on the meaning of the word, its syntactic category, its pronunciation, its morphological properties, and the argument/thematic structure.

In the computation of the structures, it is assumed in this paper the employment of the Minimalist Program particularly the *Derivation by Phase* (DBP) as outlined in Chomsky (2001, pp.1-52)[3] and *On Phases* (OP) as outlined in Chomsky (2005, pp. 1-29)[4]. Chomsky pointed out that, in DBP, syntax is computed by phase, which means primarily the complementary phrase (CP), which is not included in this study, and the transitive small VP (shorthand: v*P). CP is deemed a complete clause and therefore propositional in nature. Also, v*P is considered a phase when it is transitive, meaning that it has the full argument/thematic structure in which the external argument is specifically present. Once a phase is built, the same is sent to the phonological form (PF) and the logical form (LF) via *transfer*, making the phase impenetrable by other syntactic operations. After sending the phase, computation continues further with the upper parts of the clause. In this paper, the TP template is used for analyzing the structures. The terminal nodes in the tree structures are the loci of the lexical items (LI). Each LI is composed of phonological, semantic, and syntactic features making the LI a host of these features. In the computation, the phonological features are interpretable in the PF. The semantic features are interpretable in LF. This fact leaves the syntactic features or formal features

3 Derivation by Phase, henceforth DBP, stipulates the idea that the derivation of a sentence is done phase by phase. DBP introduces the valuation mechanism of features and of agreement. Through *Agree*, the unvalued features in the derivation are valued and undergo deletion at the terminus of the phase.

4 Chomsky's manuscript *On Phases* (OP) complements DBP in the explication of computing phases. In the probe-goal syntactic relation, agreement takes place in the domain wherein the goal has uninterpretable/unvalued features. The features of the goal value the probe features including the structural features such as Case.

in its own dimension. The formal features (FF) of the lexical item determine the syntactic behavior. In the derivation, a lexical item which is also termed as FF[α] (read: formal features of alpha/LI) enters into the computation as such. Where there are interpretable features, there are also uninterpretable ones. These uninterpretable features are removed or marked as deleted in the Spell-out before reaching the relevant interface, PF or LF.

The very central part of this aspect of grammar is the narrow syntax, which is an LF computation (Chomsky, 2001, p. 3). Narrow syntax is the particular cycle where the syntactic structure is built via *Merge*[5] in coordination with other operations such as feature checking and valuation via *Agree*[6]. *Agree* holds the constituents α and β if both constituents are local and that *α c-command β* where *α* is the *probe* and *β* is the *goal*. By probe, it means the head with the uninterpretable feature, and goal is the matching syntactic object with the interpretable feature. For the probe's uninterpretable features to delete, it searches a goal via c-command. The goal must be local to the probe meaning that it is within the domain of the probe. The goal's uninterpretable features must be unchecked making it active in the computation. After the valuation and the checking of uninterpretable features of the goal, it ceases its participatory powers in relation to *Agree* (Hornstein, et. al., 2005, pp. 317-318).

Methods and Sources of Data

For this study, fieldwork was done to collect data from the informants who are native speakers of Cebuano, Filipino, and Isamal. Six informants have been identified and consulted in this research using eliciting materials to start the collection of data. The eliciting materials[7] are composed of questions for discussion and sample sentences for native speaker's grammaticality judgment. Spoken data have been recorded, transcribed and encoded in a disk for further analysis by the researcher who is a native speaker-linguist himself. Absent is the literature on Isamal linguistics, it is theoretically sound to emphasize and to note that the standard data procurement in the generative school of linguistics is by *intuitive judgment*, a technical term that points to the consultation of native speakers for their judgment on the grammaticality and the acceptability of the utterances of the language involved in the research (Chomsky, 2008; 2002;

5 Merge is the basic syntactic operation which combines lexical items via feature checking to build a syntactic object such an X Phrase where X corresponds to the heads, namely, noun (N), verb (V), adjective (A), preposition (P), determiner (D), tense (T), small v (v), and complement (C) among others. Therefore the X Phrases can nominal phrase (NP), verb phrase (VP), adjective phrase (AP), preposition phrase (PP), determiner phrase (DP), tense phrase (TP), small verb phrase (vP), and complement phrase (CP).

6 In view of the checking relations, Agree is the syntactic operation, which is distinct from Merge, which holds the relation between the probe and the goal in checking and valuing the formal features of the concerned lexical items (Boeckx, 2008, pp. 77-78).

7 These eliciting materials were designed by the late Professor Ernesto Constantino of the Department of Linguistics, University of the Philippines.

1965). To complement the data from the fieldwork, written data were also taken from the Facebook accounts of native speakers who were the relatives of the researcher. These data were recorded using Microsoft Word and analyzed using the Minimalist Program.

The Place and the Languages in this Study

The three languages, namely, Cebuano, Filipino, and Isamal are spoken in Samal Island, Davao del Norte, Philippines. Samal Island is located in the Davao Gulf in Southeastern Mindanao. On January 30, 1998, the island was created a city by virtue of the Republic Act No. 5999. The newly made city has the official name Island Garden City of Samal, which is composed of the three original municipalities -Babak, Samal, Kaputian. It is part of the greater Metropolitan Davao that comprises Davao City, Digos, Tagum, Panabo, Carmen, and Sta. Cruz. Fieldwork shows that every speaker of Isamal is bilingual in Cebuano, the most dominant language in the island with a population of 104,123 according to Philippine Census (2015).

Isamal is one of the indigenous languages spoken in Mindanao, Philippines. It is spoken by around 8000 people in Samal Island in Davao Region of the Southern Philippines. Usually confined at home, this is perceived as a low language among its speakers and is called derogatorily as *Kanlaw* by the non-natives in the islands. The speakers of Isamal can speak bilingually in Cebuano, the most dominant language in Samal Island. The name Isamal is an erroneous exonym productively coined by Beyer (1917) by combining the Isneg locative prefix *i-* and the name of the island, Samal, to mean *from Samal* or *of Samal*. The purpose of naming so was to distinguish the Samals of Davao region and the Samals of Sulu archipelago.

Cebuano is an Austronesian language spoken as first language among the people in various regions of Visayas and Mindanao (Jubilado et al., 2015). As one of the languages in Samal Island, it is also called *Sugbuhanon* by the people of Cebu since its place of origin is called *Sugbu* by the natives themselves. Among native speakers, they also called the language *Bisaya* and *Binisaya*, a generic term which applies not only to Cebuano but to all languages in Visayas. Cebuano is the lingua franca in the Visayas and Mindanao. Current estimates project Cebuano as spoken by not less than 30 million people in the Philippines. The speakers can be located in Region VI Western Visayas, Region VII Central Visayas, Region VIII Eastern Visayas, Region IX the Zamboanga Peninsula, Region X Northern Mindanao, Region XI Davao Region, Region XII Central Mindanao, and Region XIII Caraga Administrative Region. The bulk of the population in all of these eight regions speaks Cebuano as first language.

Various languages came in contact with Cebuano. Today, the present Cebuano language has many lexical items which are a product of language contact with Chinese, Spanish, and English. In Samal Island, this is the most dominant language spoken and used in all domains.

Also spoken in Samal Island through the schools and other official functions, Filipino, the Tagalog-based national language, is the most politically dominant language in the Philippines. Its political prestige lies in the fact that it is the national language of the Philippines as provided in the 1987 Constitution of the Republic of the Philippines. Generally, the people consider Filipino or Tagalog as one language due to its very high percentage of mutual intelligibility. Much as there are others insisting the difference of the two linguistic varieties, majority consider the two languages as one and the same. Filipino or Tagalog is used in mass media, government, business, and education competing with English language, the other official language of the Philippines. Filipino also serves as the lingua franca as can be attested when one travels to another region for trade and tourism purposes[8]. Outside the university and other academic setting, English is not spoken daily (compared to the first language setting) and exclusively by the masses. English is widely understood and present in the linguistic landscape.

Unaccusative/Ergative Verbs in Cebuano, Isamal, and Filipino

Monadic verbs are a type of verbs that has only one argument in the argument/thematic structure. This type of verbs includes the unaccusative/ergative verbs. To facilitate the analysis and discussion on unaccusative/ergative verbs in Cebuano, Isamal, and Filipino, sample data are provided in the table below with the succeeding sentences in the next page.

8 With the teaching of Filipino language in the elementary and secondary schools in the Philippines, it is not uncommon to hear the shifting to Filipino from the first language among non-Tagalog speakers except the Cebuano speakers in Cebu, who are more inclined to use English. If a Filipino traveler uses English, one is either frowned at or assumed as a Filipino-American.

Table 1. Samples of Unaccusative/Ergative Cebuano, Isamal, and Filipino Verbs

No.	Cebuano	Isamal	Filipino	Gloss
1	**mag**laya	**mag**laya	**mag**layag	*to sail*
2	**mu**abot	d**um**atung	d**um**ating	*to arrive*
3	**ma**hurot	**ma**ubos	**ma**ubos	*to finish*
4	**ma**wala	**ma**tanak	**ma**wala	*to lose*
5	**ma**hulog	**ma**ug	b**um**agsak	*to fall*
6	**ma**gisi	**ma**gisi	**ma**punit	*to tear*
7	**mu**naug	**ma**nawg	**mag**baba	*to go down*
8	**mu**lupad	l**um**ayug	**mag**lipad	*to fly*
9	**mu**buto	**mag**lupuk	**mag**sabog	*to explode*
10	**mu**lakaw	**mag**panaw	**mag**panaw	*to depart*

As seen in Table 1, the Cebuano unaccusative/ergative verbs are affixed with the agentive prefixes **mag-**, **mu-**, and **ma-** which are all in boldfaced type. Both Isamal and Filipino unaccusative/ergative verbs are affixed with agentive affixes **mag-**, **ma-**, and **–um.**[9] Using some sample verbs in Table 1, the argument/ thematic structures of the verbs and the sample sentences[10] are provided below.

1. a. Muabut ang package
Ag-Cont-go D package
'The package will arrive.'
b. muabut: V : <theme >

2. a. Maglaya ya bangka.
Ag-Cont-sail D boat
'The boat will sail.'
b. maglaya: V: <theme>

9 These affixes also mark the contemplative aspect in Cebuano, Isamal, and Filipino, respectively. The perfective aspect is marked by **mi-** , **mig-** and **nag-** in the respective languages. The imperfective aspect is marked by **maga-** in Cebuano, **miga-** in Isamal, and **nag–** + reduplication of the first syllable of the root in Filipino.

10 Notations found under the sample sentences include Ag (agentive), Cont (contemplative aspect), Perf (perfective aspect), and D (determiner).

3. a. **Bumagsak ang niyog**
Ag-Perf-fall D coconut.
'The coconut fell.'
b. bumagsak:V:<theme>

All the verbs in sentences (1a), (2a), and (3a) are unaccusatives that are affixed with the agentive verbal affixes *mu-*, *mag-* and *–um* for Cebuano, Isamal, and Filipino, respectively. As shown in in the argument/thematic structures in (1b), (2b), and (3b), each of these sentences has only one argument which functions as the subject marked by the definite determiner *ang* for Cebuano and Filipino and *ya* for Isamal.[11] Although the verbs are inflected with the agentive affixes, yet the subjects are non-agents. As per respective argument/thematic structures shown in (1b), (2b), and (3b), the only available argument is the one assigned the theme theta role. Using the TP template, the structural representation of Cebuano sentence (1a) is in Figure 2.

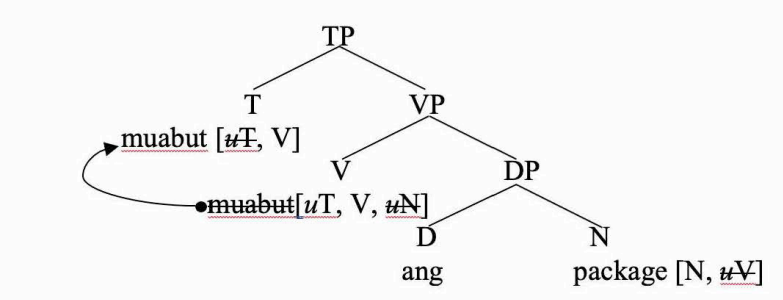

Figure 2. TP Structure of Cebuano Sentence (1a)

Following Adger (2003; 2010), the cartography in Figure 2 shows that the Cebuano unaccusative/ergative sentential projection is composed of a TP and a VP. In the VP, the checking of the features has cancelled, which is marked by the strikethrough, the following uninterpretable verbal and nominal features: [*u*V] and [*u*N]. The syntactic operation Merge ensures the assignment of the theme theta role to the DP *ang package* 'the package' by the verb *muabut* 'arrived'. There is still the uninterpretable feature [*u*T] in the feature matrix of the verb *muabut* 'arrived'. Following the syntactic operation Agree, this motivates the movement of the verb *muabut* 'arrived', which is the goal, to the node T, which acts as the probe and the locus of the temporal property of the sentence.

11 In these three languages, the definite determiner si marks the personal name as agentive subject. The object arguments are marked by ug in Cebuano, na in Isamal, and ng in Filipino. For locatives, the general marker is sa for these three languages.

With the grammaticalization of tense/aspect in Philippine languages, the tense/aspect-inflected lexical verb *muabut* 'to arrive' of Cebuano moves out of VP to T. In such manner, the VSO pattern is also reflected in the temporal layer per Theta Criterion[12]. As can be seen in the cartography, the Cebuano verb is inflected with aspect and undergoes a single movement: V to T. The node T is the probe that searches for the lexical item, in particular, the verb *muabut* 'arrived' that has the uninterpretable feature [*u*T]. To that effect, the same verb movement can be seen in Isamal and Filipino.

Unergative Verbs in Cebuano, Isamal, and Filipino

The samples of unergative verbs in Cebuano, Isamal and Filipino are presented in Table 2 below with the affixes written in boldfaced type. The sample sentential projections of selected verbs are also presented accordingly.

Table 2. Samples of Unergative Cebuano, Isamal, and Filipino Verbs

No.	Cebuano	Isamal	Filipino	Gloss
1	**mu**layas	**mag**layas	**mag**layas	*to run away*
2	**mu**languy	**mag**langoy	**mag**langoy	*to swim*
3	**mu**sabut	**ma**kadag	**mag**-unawa	*to understand*
4	**mag**hunahuna	**mag**dumdum	**mag**-isip	*to think*
5	**mu**katawa	**mag**iku	**mag**tawa	*to laugh*
6	**mu**dagan	d**um**agan	**mag**takbo	*to run*
7	**mu**luksu	**mag**lumpat	**mag**lundag	*to jump*
8	**mu**hilak	**mag**sugaw	**mag**-iyak	*to cry*
9	**mu**sayaw	**mag**sayaw	**mag**sayaw	*to dance*
10	**mu**siyagit	**mag**singgit	**mag**sigaw	*to shout*

The unergative verbs of Cebuano are generally derived by affixing the agentive prefixes **mu-** and **mag-**. Those of Isamal are by affixing **mag-**, **ma-**, and **–um** agentive verbal affixes. Filipino unergative verbs are derived by affixing generally the agentive verbal affix **–mag**[13]. Using some sample verbs in Table 2, sample sentential projections are provided below in (4), (5), and (6).

12 Theta Criterion states that every theta role must be assigned to and realized by an argument (Carnie, 2007).

13 It is very interesting to note that the Filipino variety in Samal has its agentive verbs affixed with **mag**- that is similar to the Davao variety due to its close proximity and having Cebuano as its substrate (Rubrico, 2012). For the Manila variety of Filipino, the affix -**um** is generally used such as the word **kumain** 'to eat'. What differentiates

4. **a. Mulanguy** **si Juan** **sa** **sapa.**
   Ag-Cont-swim D Juan Prep river
   'Juan will swim in the river.'
   b. mulanguy: V : <agent, locative>

5. **a. Maglumpat** **si Juan** **sa dagat.**
   AF-Cont-jump D Juan Prep sea
   'Juan will jump in the sea.'
   b. maglumpat: V: < agent, locative >

6. **a. Magtakbo** **si Juan** **sa** **aplaya.**
   AF-Perf-run D Juan Prep beach
   'Juan ran on the beach.'
   b. tumakbo: V: < agent, locative >

All the sentences in (4a), (5a), and (6a) are projections of active verbs marked by the affixes *mu-*, *mag-*, and *mag-* for Cebuano, Isamal, and Filipino respectively. As shown in in the argument/thematic structures in (4b), (5b), and (6b), each sentence has only one agentive argument DP si Juan and a locative PP. In all three languages, the determiner *si* marks the definite subject where the personal name is used to name the human entity and the preposition *sa* for the locative. The sample cartography of the unergative sentences of Philippine languages is represented below in Figure 3 by using the Isamal sentence (5a).

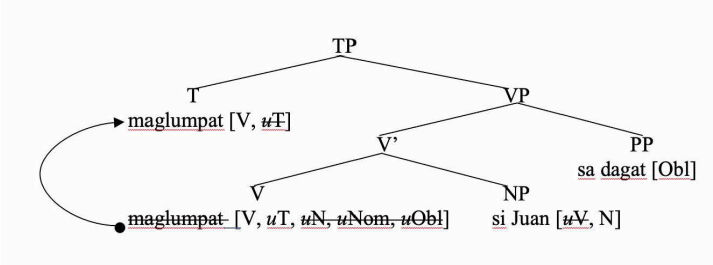

Figure 3. Cartography of Isamal Sentence 5a

this particular variety from Manila variety is the use of the prefix **maga**- for imperfective progressive aspect. For example, **magakain** 'is eating' is the equivalent of the Manila variety **kumakain** 'is eating' where the substrate is Tagalog.

The cartography in Figure 3 shows that the Isamal unergative sentential projection is composed of a VP. In the VP, it shows that it has the intermediate structure of V' that dominates the verb *maglumpat* 'to jump' and its complement NP *si Juan*. Note that the verb *maglumpat* 'to jump' has its feature matrix [V, *u*T, ~~*u*N, *u*Nom, *u*Obl~~]. The uninterpretable features [~~*u*N, *u*Nom, *u*Obl~~] are marked with the strikethrough to signify that they have undergone valuation and checking with the existing NP si Juan and the locative PP *sa dagat 'in the sea'*. What remains thereafter is the uninterpretable feature [*u*T] that motivates the movement of the verb *maglumpat* 'to jump'. It also functions as the goal of the probe T that is dominated by the TP. Similar to unaccusative VP of Cebuano, the aspect-inflected Isamal verb *maglumpat* 'to jump' moves out of VP to T, which is the locus of temporal property of the sentence.

Accusative Verbs in Cebuano, Isamal, and Filipino

The accusative verbs of Cebuano, Isamal, and Filipino are exemplified below in Table 3 with the affixes written in boldfaced type. The sample sentential projections of selected verbs are also presented in the succeeding pages.

Table 3. Samples of Accusative Verbs of Cebuano, Isamal, and Filipino

No.	Cebuano	Isamal	Filipino	Gloss
1	**mag**bayad	**mag**bayad	**mag**bayad	*to pay*
2	**mag**buhat	**mag**-inang	**mag**gawa	*to make*
3	**mag**dakup	**mag**dakup	**mag**huli	*to catch*
4	**mag**labay	**mag**dami	**mag**tapon	*to throw*
5	**mag**lutu	**mag**lutu	**mag**luto	*to cook*
6	**mag**pusil	**mag**timbak	**ma**maril	*to shoot*
7	**mag**palit	**mag**bili	**mag**bili	*to buy*
8	**mag**sulat	**mag**sulat	**mag**sulat	*to write*
9	**mag**sunug	**mag**sunug	**mag**sunog	*to burn*
10	**mag**tahi	**mag**tahi	**mag**tahi	*to sew*

The accusative verbs of Cebuano and Isamal are generally derived by affixing the agentive prefix **mag-**. In the case of Filipino unaccusative verbs, these verbs are derived by affixing generally the agentive verbal affixes **ma-**, **mang- mag-** and **–um**. Using some sample verbs in Table 3, sample sentential projections are in (7), (8), and (9) as seen on the next page.

7. **a. Magbayad si Juan ug utang.**
   AF-Cont-pay D Juan D debt
   'Juan will pay his debt.'
   b. magbayad : V : <agent, theme>

8. **a. Magtimbak si Juan na manuk.**
   AF-Cont-shoot D Juan D chicken
   'Juan will shoot a chicken.'
   b. magtimbak: V: <agent, theme>

9. **a. Magluto si Juan ng isda.**
   AF-Cont-cook D Juan D fish
   'Juan will cook a fish.'
   b. magluto:V: <agent, theme>

The sentential samples in (7a), (8a), and (9a) are projections of accusative verbs marked by the agentive affix *mag-* in the three Philippine languages. As shown in in the argument/thematic structures in (7b), (8b), and (9b), each sentence has two arguments which are assigned the agent theta role for the subject and the theme theta role for the object. In all three languages, the determiner *si* marks the definite subject where the personal name is used to name the human entity. The objects are marked by *ug* in Cebuano, *na* in Isamal, and *ng* in Filipino. The sample cartography of the accusative sentential projection of Filipino is represented below in Figure 4 by using the Filipino sentence in (9a).

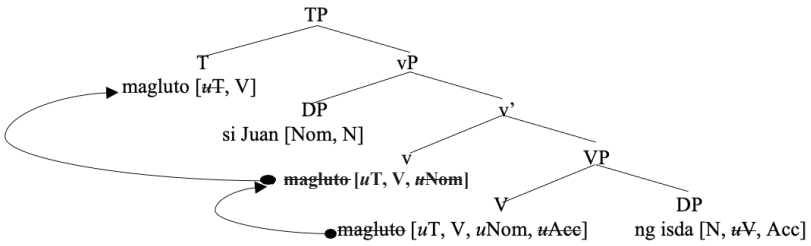

Figure 4. Cartography of Filipino Sentence 9a

Following DBP (Chomsky, 2001) and OP (Chomsky, 2005), the accusative verb *magluto* 'to cook' projects the phase vP with the embedded lexical VP. Within this phase, case checking is done altogether with the merger between the verb and its complements. There is no need for movement of the complements since the syntactic positions where merger is accomplished are also the thematic positions of the arguments. Thus, the DP *ng isda* 'a fish' is assigned the theme theta role by the verb and the accusative case values the uninterpretable case [*u*Acc] of the verb. The merger of this VP is further made sure by the checking of the uninterpretable feature [*u*V] of the DP *ng isda* 'a fish' with the interpretable feature [V] of the accusative verb *magluto* 'to cook'.

Assignment of theta roles and checking of case features are accomplished via Merge only within vP. It is the same with the DP *si Juan* wherein the assignment of the agent theta role is done via *v+magluto* and its nominative case values the uninterpretable case feature [*u*Nom] of the lexical verb the accusative verb *magluto* 'to cook'.

The aspect-inflected lexical verb of Filipino moves out of vP to T which is the locus of temporal property of the sentence. In this instance, T acts as the probe and the verb *magluto* 'to cook' is the goal since it has the uninterpretable feature [*u*T] that motivates the movement. This verb movement forms the TP shown in Figure 4.

Conclusion

As presented in this paper, the data are taken from three Philippine languages, namely, Cebuano, Isamal, and Filipino that are spoken in Samal Island. The two verb types analyzed in this paper include unaccusatives/ergatives, unergatives, and accusatives. Where all Philippine languages are assumed to be typologically VSO, each of the languages serves as the representative in the analysis and description of the verb types.

The unaccusatives/ergatives are marked with agentive verbal affixes and are given the sentential samples. Represented by Cebuano language, the Cebuano ergative verb used is *muabut 'to arrive'* that projects a big VP since it is not transitive. Similar to the unaccusatives/ergatives, the unergatives are also making use of agentive verbal affixes in deriving these verbs. In the analysis of unergatives, the Isamal verb *maglumpat 'to jump'* is used and projects a big VP. The external argument, which is an agent, has its theta role assigned in the base position and has the nominative case checked and valued also in the base position within the VP.

Common to the three Philippine languages, the accusatives are affixed with the agentive verbal prefix *mag-* and assign theme theta role to its object complement. Using Filipino language as example, the cartography of Filipino accusatives projects a small vP since the verbs, like *magluto 'to cook'* are transitive. Like the unergatives, the external argument is the agent DP which occupies [Spec, vP] position. It follows that the external argument is also the agent DP when verbs are accusatives. These configuration means that the agent theta role is assigned to the argument DP occupying [Spec, vP] which is also the syntactic position where the nominative case is checked and valued. Moreover, the accusative verbs in Philippine languages move out of vP to T since the T properties of these Philippine languages are grammaticalized. These languages are similar in terms of theta role assignment that occurs in the base positions of the arguments in the accusative configuration.

References

Adger, D. (2003). *Core syntax: a minimalist approach*. Oxford University Press.

Adger, D. (2010). A minimalist theory of feature structure. *Features: Perspectives on a key notion in linguistics*, 185-218.

Aldridge, E. (2012). Antipassive and ergativity in Tagalog. *Lingua,* 122, 192-203. https://doi.org/10.1016/j.lingua.2011.10.012

Aldridge, E. (2000). Predicate-Fronting and absolutive extraction in Seediq and Tagalog. Manuscript. Taipei: Academia Sinica.

Beyer, H. O. (1917). *Population of the Philippine islands in 1916*.

Boeckx, C. (2008). *Bare syntax*. Oxford University Press.

Burzio, L. (1986). *Italian syntax: a government-binding approach*. Dordrecht: D. Reidel Publishing Company.

Carnie, A. (2007). *Syntax: a generative introduction.* 2nd ed. Blackwell Publishing.

Census of Population (2015). "Region XI (Davao Region)". Total Population by Province, City, Municipality and Barangay. Philippine Statistics Authority.

Chomsky, N. (1965). *Aspects of the theory of syntax*. MIT Press.

Chomsky, N. (1995). *The minimalist program*. MIT Press.

Chomsky, N. (2000). Minimalist inquiries: the framework. In R. Martin, D. Michaels, & J. Uriagereka (Eds.), *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik* (pp. 89–1550). MIT Press.

Chomsky, N. (2001). Derivation by phase. In M. Kenstowicz (Ed.), *Ken Hale: A life in language,* (pp. 1-52).

Chomsky, N. (2002). *On nature and language*. Cambridge University Press.

Chomsky, N. (2004). Beyond Explanatory Adequacy. In A. Belletti (Ed.), *Structures and Beyond. The Cartography of Syntactic Structures*, (pp. 104–131). Oxford University Press.

Chomsky, N. (2005). Three Factors in Language Design. *Linguistic Inquiry,* 36, 1–22.

Chomsky, N. (2007). Approaching UG from below. In U. Sauerland, H. M. Gärtner (Eds.), *Interfaces + Recursion = Language? Chomsky's Minimalism and the View from Semantics,* (pp. 1–29). Mouton de Gruyter.

Chomsky, N. (2008). On phases. *Current Studies in Linguistics Series*, 45, 133.

Chomsky, N. (2013). Problems of Projection. *Lingua 130*: 33-49.

Dita, S. (2010). A morphosyntactic analysis of the pronominal system of Philippine languages. *In Proceedings of the 24th Pacific Asia Conference on Language, Information and Computation*, 45-59.

Dita, S. N. (2011). Ibanag nominal marking system. *Issues and trends in Applied Linguistics in the Philippines: A decade in retrospect*, 152-165.

Hornstein, N., Nunes, J., & Grohmann, K. (2005). *Understanding minimalism*. Cambridge University Press.

Jubilado, R., Ingilan, S., & Dumanig, F. (2015). Expressing profanity in Cebuano and Bahasa Sug. *JATI Journal of Southeast Asian Studies: 20*, 214-238. https://doi.org/10.22452/jati.vol20no1.9

Kitano, H. (2005). Ergativity and Equational Structure in Kapampangan 1. *Current Issues in Philippine Linguistics and Anthropology: Parangal Kay Lawrence A. Reid*, 338.

Liao, H. C. (2004). *Transitivity and ergativity in Formosan and Philippine languages* (Doctoral dissertation).

Mithun, M. (1994). The implications of ergativity for a Philippine voice system. *Voice: Form and function*, 247-277.

Nagaya, N. (2005). Information structure and constituent order in Tagalog. *Paper presented at the 2005 International RRG Conference*. Taipei: Academia Sinica

Nagaya, N. (2007). Information structure and constituent order in Tagalog. *Language and Linguistics*, 8(1), 343-372.

Nolasco, R. M., & Saclot, M. J. (2005). M-and S-transitivity in Philippine type languages. *In International Course and Conference on Role and Reference Grammar, Academia Sinica, Taipei, Taiwan,* 26-30.

Perlmutter, D. M. (1978). Impersonal passives and the unaccusative hypothesis. *In annual meeting of the Berkeley Linguistics Society,* 4, 157-190. Philippine Education Company, Inc.

Rackowski, A. (2002). *The structure of Tagalog: Specificity, voice, and the distribution of arguments* [Doctoral dissertation, Massachusetts Institute of Technology].

Rackowski, A., & Richards, N. (2005). Phase edge and extraction: A Tagalog case study. Linguistic Inquiry, 36(4), 565-599.

Radford, A. (1997). *Syntactic Theory and the Structure of English: A Minimalist Approach*. Cambridge University Press

Reid, L. & Liao, H. (2004). A Brief Syntactic Typology of Philippine Languages. *Language and Linguistics,* 5(2), 433-490.

Rubrico, J. G. U. (2012). Indigenization of Filipino: The case of the Davao City variety. Kuala Lumpur: University of Malaya.

Tanangkingsing, M. (2015, July). Epistemicity and evidentiality in Cebuano. In *The Thirteenth International Conference on Austronesian Linguistics (13-ICAL).*

Tanangkingsing, M., & Huang, S. (2007). Cebuano passives revisited. *Oceanic Linguistics*, 554-584.