

Verbal Morphological Syncretism in an Ergative Language

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1. Introduction

This paper provides a syntactic account of morphological voice syncretism in Ranmo, a morphologically ergative Papuan language belonging to the Morehead-Maró family, spoken in the Morehead District of southwest Papua New Guinea. Voice syncretisms, defined in (1), are prevalent crosslinguistically.

(1) VOICE SYNCRETISMS:

Situations in which distinct syntactic alternations (e.g., passive and reflexive) are realized with identical morphology. (Embick 1998)

Much work on voice syncretisms has focused on well-studied accusative languages (especially the Indo-European). In Greek, for example, a number of syntactic alternations syncretize in the so-called Non-Active voice, which is in opposition to the morphologically unmarked Active voice. All passive verbs (2a) and certain reflexives (2b) appear in the Non-Active morphology. Another environment in which it appears is anticausative verbs (2c), which alternate with their transitive active counterparts. Finally, the Non-Active class also includes deponents, which lack their Active counterparts (also known as ‘non-oppositional middles’ for this reason) (2d).

(2) a. Afto to vivlio dhiavas-tik-e xtes.

this-NOM the-NOM book-NOM read-N/A-3S yesterday
‘This book was read yesterday.’

b. I Maria xtenize-te kathe mera.

the-NOM Maria-NOM comb-N/A.3S every day
‘Maria combs herself every day.’

c. tsakizo-me

break-N/A
‘break-Intransitive’

d. To kalokeri xriazo-maste pola ruxa.

the summer need-N/A.1PL many clothes
‘During the summer we need many clothes.’

(Embick 2004:143)

The occurrence of the syncretism between passives, reflexives, and anticausatives is prevalent across many unrelated language families, including the Indo-European, Uto-Aztecan, Athapaskan, Turkic, Ethiopian Semitic, and Dravidian (Embick 1998:4). Embick argues that the systematicity of the pattern prevents these syncretisms from being treated as accidental homophonies, and offers an analysis which captures their being governed by syntactic and morphological considerations.

* Jenny Lee, Harvard University, lee37@fas.harvard.edu. This research was supported by the NSF Doctoral Dissertation Research Improvement Grant #1263754. I wish to thank the people of Yenthoroto village for sharing their language with me, especially my late host brother Sèu Sataia. Special thanks also go to Isabelle Charnavel, Maria Polinsky, Omer Preminger, and Nina Radkevich, as well as to the audience of WCCFL 33 and the anonymous reviewers of my abstract. Abbreviations used: ABL = ablative, ADJZ = adjectivizer, ALL = allative, APPL = applicative, DI = derived intransitive, FOC = focus, LOC = locative, M = middle, MULT = multiplicity, NMLZ = nominalizer, NON.FUT = non-future, NSG = non-singular, SGM/F = singular masculine/feminine, O = object, POS = positional, RED = reduplicate, S = subject, STAT = stative

The crux of his proposal, implemented within the Distributed Morphology framework, is that the information required for the realization of non-active morphology is localized to *v*—whatever the specific properties of *v* may be (e.g., passive, reflexive). Crucially, that localized information is not a feature *F* in the *syntactic* computation that must be, for example, checked in the overt syntax. That is, the analysis in (3) is not tenable. (See Embick 1998 for arguments against this alternative analysis.)

(3) $V \rightarrow V\text{-[NonAct]} / \text{--- } F$

Rather, he proposes, that a [NonAct] feature is inserted in the *postsyntactic* component when certain conditions are met, namely, when *v* is not in a local relationship with an external argument. This is captured by the rule in (4).

(4) $V \rightarrow V\text{-VOC[NonAct]} / \text{--- No external DP argument}$

The insertion rule in (4) illustrates a property he calls *dissociation*, defined below.

(5) **Dissociation:** A morphological signal is *dissociated* when the morphosyntactic position/features it instantiates are not features figuring in the syntactic computation, but are instead *added in the Morphological component under particular conditions*

The treatment exploiting dissociation allows for morphological features like [NonAct] to be related to a “coherent set of syntactic configurations...but does not allow situations in which a single feature is related to two disparate sets of syntactic configurations” (p. 2).

In this paper, I consider how well an analysis like (4) would fare for voice syncretisms found in a non-Indo-European language. Drawing on data from an understudied morphologically ergative Papuan language, Ranmo, I demonstrate that the structural factor uniting syncretic constructions in this language is not the lack of an external argument. Moreover, I argue that dissociation is not implicated in Ranmo voice syncretism. This leads us to the conclusion that there are multiple sources for morphological voice syncretisms crosslinguistically.

A crucial empirical fact to be accounted for in Ranmo is that both unergatives and anticausatives—the latter considered to be prototypical instances of unaccusative verbs—are realized with identical morphology, so-called middle morphology. I propose that all verbs bearing middle morphology project an external argument (though their semantics may suggest otherwise). I further argue that the middle marker is not the morphological realization of a feature that is inserted postsyntactically, but rather it instantiates failed (or default) agreement in the syntactic derivation, in the sense of Preminger (2009, 2011, 2014).

This paper is organized as follows. Section 2 discusses how middle verbs compare with other predicate types in Ranmo, as well as their semantic distribution. Section 3 provides an account of the middle syncretism. Finally, section 4 concludes.

2. Voice syncretism and middle verbs in Ranmo

2.1. Intransitive verbs in Ranmo

An important typological feature of Ranmo is that it has a very small class of ‘pure intransitives,’ i.e., one-place predicates which are not (directly) derived from (or alternate with) any other predicate type (i.e., transitive verbs). Broadly speaking, pure intransitives can be divided into two classes based on their semantics. One subclass includes all stative positional verbs such as *be immersed*, *be on top*, *be forked in*, *be in a leaning position*, and *be horizontal*, exemplified in (6). The other subclass includes a very small number of event-denoting verbs which show the properties of unaccusative verbs in many languages, such as *arrive*, *die*, *rest*, *emit* and *be*, as exemplified in (7).

(6) STATIVE POSITIONALS IN RANMO

- a. Sèkufa tarfu-en y-manggal. (>yèmanggal)
cigarette mouth-LOC 3sgmO.α:STAT-be.on.a.body.part.POS
'A/the cigarette is in the mouth.'
- b. Takar mènng-fa y-mol. (>yèmol)
ladder house-ALL 3sgmO.α:STAT-lean.POS
'A ladder is leaning against the house.'

(7) EVENTIVE PURE INTRANSITIVES IN RANMO

- a. Fi y-lorar.
3ABS 3sgmO.α-arrive
'He is arriving.'
- b. Fi s-a-lif.
3ABS 3sgmO.γ-APPL-die
'He died.'

I will refer to both these classes collectively as 'unaccusatives' at times (interchangeably with 'pure intransitives'). The most distinguishing feature of these verbs is that they encode their sole subjects with the same agreement prefixes used to mark the objects of transitive verbs.

All *other* verbs which are syntactically and semantically intransitive crosslinguistically—for example, *laugh*, *bark*, *run*, *dance*, etc.—are realized as morphologically middle verbs in Ranmo¹. Middle verbs are immediately recognizable by two formal features. First, unlike pure intransitives, they pattern with the *subjects* of transitive verbs in marking their arguments with subject agreement suffixes. In addition, middle verbs contain a sequence of two prefixes which always co-occur with each other. These are the 'middle' (M) and 'derived intransitive' (DI) morphemes, shown in (8). I will refer to this sequence as 'middle morphology.'

- (8) a. Ni *(ng)-a-mayuk-e.
1nsg.ABS M.α-DI-wash-1nsgS
'We are bathing.'
- b. Ni ng-*(a)-mayuk-e.
1nsg.ABS M.α-DI-wash-1nsgS
'We are bathing.'

We know that the middle prefix and the derived intransitive prefix realize two distinct morphemes (i.e., they do not constitute the monomorphemic *nga-) because they can be separated in certain TAM environments². For example, the non-future prefix *f-* may intervene between the two morphemes, in which case the middle morpheme is realized with a different phonological exponent (drawn from the β-series).

- (9) Ni k-f-a-mayuk-e. (>kwamayuke)
1nsg.ABS M.β-NON.FUT-DI-wash-1nsgS
'We bathed.'

For completeness' sake, take a look at the transitive verbs in (10). Monotransitive verbs show agreement with both the subject and the direct object, as in (10a). These verbs can be applicativized, introducing an additional argument bearing the Recipient role, as in (10b). In applicative constructions, the applied argument controls object agreement. The direct object is not cross-referenced by the verb.

¹ Other languages of the Morehead-Maró family also share this characteristic, including Nen (Evans 2014) and Kómno (Döhler in prep).

² Note that the middle morpheme shows allomorphy for TAM; this co-variance is indicated by distinct Greek letters.

- (10) a. Kèn fur y-yikan-Ø. (>yikan)
 1sg.ERG baby 3sgmO.α-carry-sgS
 ‘I am carrying a/the baby.’
- b. Kèn mbone fèfè ngg-f-a-wèr-Ø. (>nggèfawèr)
 1sg.ERG 2sg.GEN yam 2sgO.β-NON.FUT-APPL-plant-sgS
 ‘I planted yams for you.’

The following table summarizes the phi-agreement patterns of the three major predicate types in Ranmo just discussed.

Transitive	Non-transitive	
	Middle	Unaccusative
Subject and object agreement (“fully agreeing”)	Subject agreement only	Object agreement only

Table 1: Phi-agreement in Ranmo by predicate type

Transitive verbs pattern with middle verbs in showing suffixal subject agreement, to the exclusion of unaccusative verbs. Transitive verbs pattern with unaccusative verbs in showing prefixal object agreement, to the exclusion of middle verbs. While middle verbs lack object agreement, I show that there is still an important relationship between middle morphology and object marking, namely, that they are in complementary distribution with each other. This fact will have a straightforward explanation under the analysis provided in section 3, wherein the middle prefix is treated as the morphological instantiation of failed object agreement in the sense of Preminger (2009, 2011, 2014).

2.2. Distribution of middle verbs

In this section, I discuss the range of semantic subtypes expressed by middle verbs in Ranmo. In particular, I show that Embick’s account based on the two ingredients—syntactic unaccusativity (i.e., the absence of an external argument) and the notion of dissociated morpheme—cannot easily handle distributional facts surrounding Ranmo middle verbs.

As discussed above, most verbs that are intransitive crosslinguistically are realized as morphological middles in Ranmo. They form a large class, encompassing a wide variety of semantic subtypes, which I categorize as either “canonical” or “non-canonical” depending on how closely they conform to crosslinguistic patterns of voice syncretism. First, consider the “canonical” environments of voice syncretism; these involve anticausative and reflexive/reciprocal constructions (as in Greek).

- (11) ANTICAUSATIVE
- a. Ndótar ng-a-rèfu-ai. (>ngarfui)
 door M.α-DI-open-2/3nsgS
 ‘(The) doors are opening.’
- b. Glas ng-a-wá-Ø.
 glass M.α-DI-break-sgS
 ‘(The) glass is breaking.’
- (12) REFLEXIVE/RECIPROCAL
- a. Ke ta ng-a-rir-Ø.
 1sg.ABS FUT M.α-DI-scratch-sgS
 ‘I am going to scratch myself (I’m itchy).’
- b. Yikal bár-fo ng-a-rir-ai. (>ngariri)
 man back-ABL M.α-DI-scratch-2/3nsgS
 ‘(The) men are scratching each other’s backs.’

Both construction types undergo transitivity alternation, as exemplified in (13a). Another characteristic they have in common is that their infinitive form (which is stripped of all agreement and TAM inflection) can take an adjectivizing suffix under the copula to form stative predicates, as in (13b).

- (13) a. TRANSITIVITY ALTERNATION
 Kèn ndótar y-rèfu-Ø. (>yèrfu)
 1sg.ERG door 3sgmO.α-open-sgS
 ‘I am opening a/the door.’
- b. ADJECTIVAL STATIVE PREDICATE
 Ndótar rèfu-se-tha y-ra. (>yèrà)
 door open-NMLZ-ADJZ 3sgmO.α-be
 ‘A/the door is open.’

Since the noun phrases in (11a) correspond to the absolutive objects of the transitive clauses in (13a), one may be tempted to analyze the anticausatives in (11) as raising constructions in which the surface subject originates in the internal argument position. This is akin to how passive, raising, and unaccusative constructions are derived in many languages, schematized in (14).

- (14)
-
- ```

graph TD
 XP --> DP1
 XP --> X_prime[X']
 X_prime --> X
 X_prime --> vP
 vP --> v
 vP --> VP
 VP --> V
 VP --> ti

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However, there are some ‘non-canonical’ environments of voice syncretism which do not involve unaccusative semantics, undermining (at least) a *uniform* analysis of middles as involving raising. These environments involve unergatives, antipassives, and weather verbs, which are exemplified below.

- (15) UNERGATIVE
- a. Fi (yak) ng-a-yikan-Ø. (>ngekan)  
 3ABS run M.α-DI-carry-sgS  
 ‘He is running.’
- b. Thinto ng-a-lèfèn-ai. (>ngalfèni)  
 bird M.α-DI-fly-2/3nsgS  
 ‘(The) birds are flying.’
- c. Fi mbèr-se ng-a-mbèr-Ø.  
 3ABS hug-NMLZ M.α-DI-hug-sgS  
 ‘S/he is playing/laughing/having fun.’
- (16) ANTIPASSIVE
- Kèn/ke tauri-r ng-a-miku-Ø.  
 1sg.ERG/1sg.ABS wallaby-OBL M.α-DI-look.for-sgS  
 ‘I am looking for wallabies.’
- (17) WEATHER VERBS
- a. Sai ng-a-ru-Ø.  
 rain M.α-DI-rain-sgS  
 ‘It is raining.’
- b. Faina ng-a-lai-Ø.  
 thunder M.α-DI-thunder-sgS  
 ‘It is thundering.’

There is no *prima facie* evidence that these non-canonical middles underlie distinct syntactic structures than canonical middles. They show the same middle morphology as well as subject agreement; undergo transitivity alternation (18a); and may be adjectivized in their infinitive form to be embedded under the copula to derive stative constructions, which are passive-like in their meaning (18b).

- (18) a. Sai-o ke w-ru-∅. (>wèru)  
 rain-ERG 1sg.ABS 1sgO.α-rain-sgS  
 ‘It is raining on me.’
- b. Rusa (sai) ru-se-tha y-ra. (>yera)  
 deer rain rain-NMLZ-ADJZ 3sgmO.α-be  
 ‘A/the deer is rained on.’

### 3. Analysis

I argue that while the middle class is semantically heterogeneous, the different semantic subtypes should be given an identical syntactic treatment. Specifically, I show that the so-called voice syncretism in Ranmo arises due to the interaction between language-specific facts about phi-agreement in Ranmo and the unique way in which the majority of verbs which are intransitive crosslinguistically are realized in Ranmo—namely, via antipassivization involving objects without phi-features (or no objects at all).

First, I show that the subjects of all semantic subtypes of middle verbs are external arguments generated in Spec,vP rather than originating in the complement position of VP and then raising to check an EPP or case feature. Second, I propose that the middle morpheme is best characterized as a default object agreement morpheme.

#### 3.1. *The surface subject is not derived*

In Embick (1998)’s proposal for Greek Non-Active morphology, the common structural factor uniting the various constructions is the absence of an external argument in the syntactic representation. The internal argument is taken to raise to check a case or EPP feature. Needless to say, this kind of analysis assumes that the morphology can and must make reference to the input to the syntactic derivation, i.e., to the representation prior to any syntactic operations like A-raising take place.

In this section, I argue that such an analysis cannot be extended to middle verbs Ranmo. Specifically, there is no raising of the kind illustrated in (14). Rather, the subjects of middles are merged in an external argument position, in Spec,vP.

Several empirical facts point to this conclusion. First, as already discussed, there is a large subset of middle verbs whose subjects are clearly associated with the Agent theta role; they are unergative verbs, which are characteristically defined by their ability to project an external argument. Verbs in this class include *fly*, *laugh*, *bark*, *dance*, and *nurse/breastfeed*. A good number of them bear ergative case, as exemplified in (19).

- (19) a. Ngatha-ngo ng-a-bi-∅.  
 dog-ERG M.α-DI-bark-sgS  
 ‘A/the dog is barking.’
- b. Ngatha-ngo fewafewa ng-a-karak-∅.  
 dog-ERG smell.RED M.α-DI-pull-sgS  
 ‘A/the dog is smelling (around).’

If ergative case marking is any indication of external argumenthood, assigned inherently<sup>3</sup> by transitive *v*, then at least a subset of middle verbs are not amenable to a raising analysis in which the surface subject is derived from an internal argument position. The alternative, of course, is that the subjects of middles are generated in Spec,vP where they receive ergative case from an external argument-projecting *v* head, parallel to how the experiencer subjects of psych-verbs receive inherent dative case in some languages.

<sup>3</sup> As in, for example, Woolford (1997, 2006), Massam (2006), Legate (2008, 2012), and others.

Another piece of evidence against a (uniform) analysis of middle verbs as lacking an external argument is that there exist a subset of middle verbs which allow a non-oblique (as well as oblique) argument in the direct object position, as exemplified in (20).

- (20) a. Kèn kom ng-a-yuna-Ø. (>ngona)  
1sg.ERG water M.α-DI-drink-sgS  
'I am drinking water.'
- b. Ngathan-ngo tauri-ane fewa ng-a-karak-Ø.  
dog-ERG wallaby-GEN smell M.α-DI-pull-sgS  
'A/the dog is smelling the wallaby' (lit. a/the dog is pulling the wallaby's smell).
- c. Natha-ngo tauri-r ng-a-yinggiar-Ø. (>ngenggiar)  
dog-ERG wallaby-OBL M.α-DI-chase-sgS  
'A/the dog is hunting wallabies' (lit. a/the dog is chasing around for wallabies).'

As with unergative middle verbs (19) and fully agreeing transitive verbs, the subjects of these verbs bear ergative case (though there is typically optionality between ergative and absolutive case on the subject when the object is oblique case-marked). Moreover, the objects of these verbs share many properties in common with those of fully agreeing transitive verbs. This means that the objects in (20) cannot be analyzed as (pseudo-)incorporated nominals (for example), so that the constructions in (20) are in fact formally intransitive (i.e., one-place).

First, the object *water* in (20a) show properties characteristic of full DP objects: they can, for example, be modified (21a-b), relativized (21c) and extracted (21d-e). Notice also in (20b) the object is an extended nominal projection, i.e., a noun head modified by a genitive case-marked argument.

- (21) a. Kaia kèn kewán kom k-f-a-yuna-Ø. (>kwona)  
yesterday 1sg.ERG a lot water M.β-NON.FUT-DI-drink-sgS  
'Yesterday I drank a lot of water.'
- b. Kèn ta ng-a-yuna-Ø tuti kom. (>ngona)  
1sg.ERG FUT M.α-DI-drink-sgS creek water  
'I'll drink creek water.'
- c. Fèna-mo kom kèn fof k-f-a-yuna-Ø. (>kwona)  
FOC-SRC water 1sg.ERG FOF M.β-NON.FUT-DI-drink-sgS  
'That is the water that I drank.'
- d. Fèn ro ng-a-yuna-Ø? (>ngona)  
2ERG what M.α-DI-drink-sgS  
'What did did drink?'
- e. Fèn ro k-f-a-semingg-Ø sèkora-n? (>kwasemingg)  
2ERG what M.β-NON.FUT-DI-teach-sgS school-LOC  
'What did you learn in school?'

The same properties are exhibited by the objects of transitive verbs which show full agreement with both arguments.

- (22) a. TRANSITIVE OBJECTS CAN BE MODIFIED  
Kèn kewán bol frifri-ka s-f-faklèk-an-Ø. (>soufaklèkan)  
1sg.ERG many ball table-LOC 3sgmO.β-NON.FUT-put.on.top-MULT-sgS  
'I put many balls on the table.'
- b. TRANSITIVE OBJECTS CAN BE RELATIVIZED  
Iljae fèna fof y-ra Salima-ngo taire mafan s-a-nt-Ø.  
Iljae FOC FOF 3sgmO.α-be Salima-ERG bag to.whom 3sgmO.γ-APPL-give-sgS  
'Iljae is the one to whom Salima gave the bag.'

## c. TRANSITIVE OBJECTS CAN BE EXTRACTED

Fèn ro y-luwar-an-Ø? (>yèluwaran)  
 2ERG what 3sgmO.α-look.for-MULT-sgS  
 ‘What are you looking for?’

What, then, distinguishes middle verbs which take two non-oblique arguments (like (20a-b)) from fully-agreeing transitive verbs, which also take two non-oblique arguments? I propose that the single unifying syntactic feature shared by all middle verbs (which distinguishes them from fully agreeing transitive verbs) is that their objects (if any) lack phi-features. This is stated in (23).

## (23) THE UNIFYING FEATURE OF MIDDLE VERBS

The objects of middle verbs (if present) lack phi-features.

This generalization immediately captures the contrast between the middle verbs in (20) and their fully agreeing transitive counterparts shown in (24) below. In (24), an object agreement prefix appears in place of the middle marker and the derived intransitive marker goes away. Note that in (24b), the verb agrees with the genitive case-marked argument bearing the Possessor role. I assume that this argument has been externalized from its original position within the VP. The object itself (*fewa* ‘smell’) is absolutive case-marked.

- (24) a. Kèn kom y-yuna-Ø. (>yuna)  
 1sg.ERG water 3sgmO.α-drink-sgS  
 ‘I am drinking water.’
- b. Ngathan-ngo tauri-ane fewa y-a-karak-Ø.  
 dog-ERG wallaby-GEN smell 3sgmO.α-APPL-pull-sgS  
 ‘A/the dog is smelling the (male) wallaby’ (lit. a/the dog is pulling the (male) wallaby’s smell).
- c. Kèn ngai y-yinggiar-Ø. (>yinggiar)  
 1sg.ERG pig 3sgmO.α-chase-sgS  
 ‘I am chasing a/the pig.’

Note that there is a semantic difference between (21b,c) and (24b,c): the objects in the latter must be specific and referential. However, no parallel semantic difference appears to exist between (21a) and (24a), nor a syntactic one (other than the fact that there is phi-agreement in the latter): the direct object *water* can be modified, relativized, and extracted in both cases. The relevant generalization seems to require reference to the animate vs. inanimate distinction: inanimate arguments like *kom* ‘water’ can enter the derivation either bearing or not bearing phi-features, leading to the two possible surface realizations (i.e., the middle and the transitive verb form).

This implies that part of what it means for an argument to be animate is to be specified for phi-features. Therefore, the presence of a [+animate] feature on an argument necessarily entails the presence of phi-features, leading to the culmination of phi-agreement (unless, of course, it is oblique case-marked and therefore inside a phase, inaccessible for agreement). The reverse, however, is not true: the presence of phi-features does not automatically entail animacy. Thus, *kom* ‘water’ in (24a) contains phi-features without [+animate]. It is an eligible target for agreement.

This distinction gives us a straightforward account of the nature of the middle prefix in Ranmo: it is the morphological realization of failed object agreement, reflecting something that occurs during the course of the *syntactic* derivation. I elaborate on this in the next section.

### 3.2. Failed agreement in Ranmo

In the previous section, I argued that the surface position in which the subjects of middle verbs are found—the specifier of vP—is not a derived position. Rather, they are base-generated there. It is this property that sets middle verbs apart from pure intransitives, whose subjects originate in the object position and are therefore encoded with the agreement prefixes of transitive objects.



In this section, I demonstrate further why Embick (1998)'s analysis cannot be extended to capture the voice syncretism in Ranmo. It is fundamentally different from syncretisms of the kind attested in Greek and other similar accusative languages. The morphological syncretism in Ranmo arises as a result of purely *syntactic* facts and need not be analyzed as an instance of dissociation (5).

Let us consider what a possible postsyntactic account would look like for Ranmo. Given the generalization in (23), the insertion of a morphological feature would be conditioned by the absence of phi-features on the object (or by the absence of an object altogether). Let's call this feature [Middle]. The relevant rule would be as in (25).

(25)  $V \rightarrow V\text{-VOC}[\text{Middle}] / \text{--- No object phi-features}$

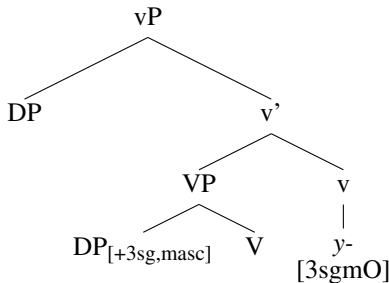
Technically, the analysis in (25) would give us the right result; however, a more straightforward alternative analysis is available. One reason to prefer this analysis is because it captures the behavior and distribution of middle verbs in such a way they align with facts about agreement in Ranmo.

First, I propose that *v* contains unvalued instances of phi-features which must obligatorily enter into syntactic agreement with a goal containing valued instances of phi-features<sup>4</sup>. By "syntactic agreement," I mean the process whereby the probe minimally *searches* its *c*-command domain for an agreement target.

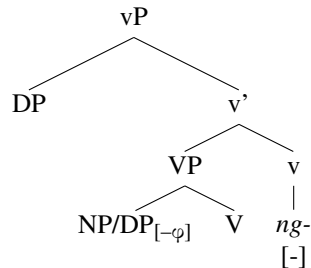
One of two things may occur as a result of this search operation: *v* may successfully locate a goal to agree with, or it may not. The two possible outcomes are schematized in (26). In the first case, we have successful phi-agreement with the internal argument and *v* is spelled out with the appropriate phi-features at PF (as in fully agreeing transitive verbs and pure intransitive verbs). In the latter case—where *v* fails to locate a goal containing a full set of phi-features—no valuation occurs and *v* will not have its phi-features valued. What is crucial is that this will *not* result in ungrammaticality, or a "derivational crash," as would be predicted by Chomsky's (2000, 2001) system. Instead, it will simply lead to default spell-out. This provides support for Preminger (2009, 2011, 2014), who argues that the obligatory nature of phi-agreement is "best handled in terms of an operation—one whose invocation is obligatory, but whose successful culmination is not enforced by the grammar" (p. 175).

Under this account, the middle prefix arises when the probe *v*—the locus of object agreement—fails to find an appropriate target to agree with, namely, a DP/NP containing a full set of phi-features<sup>5</sup>.

(26) a. SUCCESSFUL AGREEMENT



b. FAILED AGREEMENT



At PF, vocabulary insertion takes place according to the following rules. In the event of failed agreement (26b), *v* will be without valued phi-features and spelled out with the exponent *ng-* according to (27c).

<sup>4</sup> The other functional head involved in agreement, of course, is T. T also probes its *c*-command domain for a goal to agree with. In transitive clauses, this will lead to T agreeing with the external argument in Spec,vP. In pure intransitives, however, *v* is the primary agreement probe which enters into agreement with the sole internal argument. While T also obligatorily probes (as in all other predicate types), it does not *also* agree with the already agreed-with argument. This may be due to unaccusative/pure intransitive *v* being a phase (and therefore impenetrable for probing) or to some version of the Activity Condition (Chomsky 2000, 2001) which prevents an argument from being agreed with more than once.

<sup>5</sup> In many languages, failure to agree gives rise to third person singular agreement morphology. We see that this is not what happens in Ranmo: a dedicated exponent is available for default agreement instead (i.e., the middle prefix). This is an idiosyncrasy of Ranmo, but nothing in the theory rules out the possibility. The specific phonological exponent used to spell out a certain morpheme is a choice made in the lexicon of the language, so this is a completely predictable and unremarkable result.

- (27) VOCABULARY ITEMS
- a. v[3sg, masc] ↔ y-
  - b. v[1sg] ↔ w-
  - c. v[-] ↔ ng-

On the proposed analysis, no dissociated element need be posited. Given the consideration of parsimony and the fact that the proposed account more transparently captures the close relationship between middle marking and object agreement, the proposed account is to be preferred to the postsyntactic account.

## 4. Conclusion

Embick (1998)'s analysis of voice syncretisms in Greek and other languages relies on the following two component: (i) the absence of an external argument and (ii) the notion of dissociated morpheme. In this paper, I showed that this analysis cannot be extended to capture syncretism facts in Ranmo. First, I demonstrated that the surface subjects of middle verbs are base-generated in Spec,vP rather than raising from an internal argument position. Moreover, I proposed that the middle marker need not correspond to some dissociated morphological feature which is inserted postsyntactically under certain syntactic conditions; rather, it is better analyzed as the morphological instantiation of agreement which has been attempted but failed in the syntactic derivation. In this way, I identified another empirical domain of failed agreement in the sense of Preminger (2009, 2011, 2014).

Morphological voice syncretisms in languages like Greek crucially rely on the the mediating role of the Morphology (the postsyntactic component). In Ranmo, on the other hand, syntactic alternations resulting in voice syncretism reflect differences in the featural makeup of the direct or indirect object, specifically that phi-features are absent from the objects of middle verbs. We have therefore seen that voice syncretisms are a heterogeneous phenomenon crosslinguistically, reflecting either a late (postsyntactic) operation or a peculiarity in the syntactic derivation (failed agreement). The deeper question which remains to be answered is *why* such crosslinguistic variation exists and whether different sources of voice syncretism are associated with distinct clusters of other properties in the languages.

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