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ROVIANA FRONTING AND THE RELATIONSHIP BETWEEN SYNTACTIC AND MORPHOLOGICAL ERGATIVITY

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PREFACE

The 26th Annual Meeting of the Austronesian Formal Linguistics Association (AFLA 26) was held on May 24-26, 2019 at the University of Western Ontario (Canada). The programme consisted of 24 presentations in addition to four plenary talks by Juliette Blevins, Vera Hohaus, Marian Klamer and Becky Tollan. This volume includes 13 papers from the conference.

As conference organizer, I received generous support from a variety of sources. Financial support came from the Social Sciences and Humanities Research Council of Canada (SSHRC), Research Western, the Joint Fund (Research Western, SOGS, SGPS), the Theoretical and Applied Linguistics Lab, the Canadian Linguistic Association, the Faculty of Arts and Humanities, the Graduate Program in Linguistics and three departments (French Studies, Modern Languages and Literatures, and Anthropology). The conference would not have been possible without the student volunteers (Sonia Masi, William Tran, Caylen Walker and Kang Xu), plus several others who helped out at the registration desk. Finally, I am grateful to the Department of French Studies for administrative support.

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ROVIANA FRONTING AND THE RELATIONSHIP BETWEEN SYNTACTIC AND MORPHOLOGICAL ERGATIVITY*

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How do ergative-absolutive patterns in morphological case marking systems relate to ergative-absolutive patterns in the syntax proper? We evaluate some competing theories of morphosyntactic ergativity with reference to a case study from Roviana (W. Oceanic, Solomon Islands). Roviana demonstrates morphological ergativity in its case-marking system, and in its extraction patterns. However, in both cases, the Roviana pattern seems to be the reverse of the more typologically expected pattern: (i) the absolutive m-case, but not the ergative m-case, is overt, and (ii) ergatives, but not absolutives, are able to undergo a certain type of extraction. We propose these facts receive a clear explanation under an analysis where both syntactically and morphologically ergative phenomena reference underlying features which track an NP's grammatical relation.

1. Introduction

We take a syntactic phenomenon to be 'syntactically ergative' if it groups S (the sole argument of an intransitive clause) and P (the transitive object) to the exclusion of A (the transitive subject). A paradigm example from West Greenlandic is in (1) in which only S and P, but not A, may be relativized without additional verbal morphology.

(1) a. [*miiqqa-t_i*]$_S$ [t_i *sila-mi pinnguar-tu-t*]
child-ABS outdoors play
'the children who are playing outdoors.' Bittner (1994)

b. [*miiqqa-t_i*]$_P$ [*Juuna-p* t_i *paari-sa-i*]
child-ABS Juuna-ERG look.after
'the children that Juuna is looking after.'

c. *[*angut$_i$*]$_A$ [t_i *aallaat tigu-sima-sa-a*]
man.ABS gun.ABS take
'the man who took the gun.'

The literature on syntactic ergativity focuses on the sort of 'absolutive-only' phenomenon demonstrated here in West Greenlandic, in which the absolutive arguments are able to be relativized, but the ergative argument is not. Polinsky (2016) even

* With thanks to Jens Hopperdietzel, Paul Kiparsky, and audiences at AFLA 26 in London, Ontario, and at the University of Hawai‘i at Mānoa. Special thanks to Frank Tuke and Glo Oxenham for sharing their language expertise.

takes this kind of exclusive application of A'-movement to absolutive arguments to be definitional of syntactic ergativity.

(2) Syntactic ergativity:
the inaccessibility of the ergative arguments to A'-movement ... as contrasted with the accessibility of absolutive arguments to such movement.
Polinsky (2016)

In this paper, we raise the question of the status of 'ergative-only' syntactic phenomena. We observe in Roviana a particular sort of A'-movement phenomena which applies exclusively to non-absolutive core arguments, unable to apply to absolutive arguments. The basic paradigm is in (3). We observe that in Roviana, the transitive subject is able to occur pre-verbally, but not the transitive patient or intransitive subject.

(3) a. [*esei*]$_A$ *hena=ia* *sa* *rereke*
who eat=3SG.OBJ ART mango
'Who ate the mango?'
b. *[*esei*]$_{S/P}$ {*taloa* | *taka=ia* *Bili*}
who left kick=3SG.OBJ Bill
'Who left/Who did Bill kick?'

We present these data as challenges for extant theories of syntactic ergativity. For example, we argue that 'inversion'-based accounts of syntactic ergativity, e.g., Aldridge (2004), Coon et al. (2015), do not easily extend to these data. We argue the data support a feature-based approach to syntactic ergativity of the sort proposed in Otsuka (2006) and Deal (2016). However, we argue that the featural inventory proposed in those works is can be decomposed for better theoretical parsimony. We propose a category of features on NPs which signals their relative rank along the thematic hierarchy, adapting a proposal from Kiparsky (1997).

This paper develops a theory of syntactic ergativity which is sufficiently general to extend to 'absolutive-only' extraction phenomena like West Greenlandic relativization, and 'ergative-only' extraction phenomena like Roviana fronting. We further suggest a new way to distinguish ergative and non-ergative languages as featurally distinct. We propose that non-ergative languages lack a means to featurally distinguish whether an NP is or is not the *lowest* ranked argument along a thematic hierarchy. We explain how this proposal allows us to understand why syntactic ergativity isn't observed in languages that lack morphological ergativity.

2. Roviana Ergativity

Roviana is a verb-initial language with an ergative-absolutive case marking system. Roviana displays a VS word order for intransitive clauses as in (4) and VAP word order for transitive clauses as in (5).

(4) *mae* [*sa siki*]$_S$
come ABS dog
'The dog comes.' Intransitive VS

(5) *taka=ia* [*Bili*]$_A$ [*sa siki*]$_P$
kick=3SG.OBJ Bill ABS dog
'Bill kicked the dog.' Transitive VAP

Roviana indexes the person/number-features of P with a pronominal enclitic on the verbal complex.

(6) a. *taka=au* [*sa*]$_A$ [*si rau*]$_P$
kick=1SG.OBJ 3SG ABS 1SG
'He kicked me.'
b. *taka=igo* [*rau*]$_A$ [*si goi*]$_P$
kick=2SG.OBJ 1SG ABS 2SG
'I kicked you.'

2.1. Morphological Ergativity

A robust universal generalization since Dixon (1979) is that languages demosntrating syntactically ergative phenomena (such as West Greenlandic relativization) also demonstrate morphologically ergative phenomena. Morphologically ergative phenomena are those which group together S and P to the exclusion of A in regard to morphological phenomena such as case marking or verbal agreement. Roviana displays morphological ergativity via its case marking system.

The following is a brief introduction to the case marking of pronouns, proper nouns, and common nouns in Roviana. For further detail, see Schuelke (2016). We assume the following forms for case-markers and determiners, including a null ergative case marker:

(7)

	Case markers
ERG	ø
ABS	*si*
DAT	*koa*

	Determiner
Common noun	*sa*
Pronoun	ø
Proper noun	*e*

Case-markers and determiners form portmanteaus, summarized below. Note that, as expected, with the null ergative case marker, the determiners retain their base form.

(8)

	ERG	ABS	DAT
Common noun	*sa*	*sa*	*koa sa*
Pronoun	ø	*si*	*koa*
Proper noun	*e*	*se*	*koe*

Determiners on A only appear when the A is fronted to a pre-verbal position. Thus the determiner forms in the ERG column of the table in (8) are only visible in this context.

(9) {*sa siki* | *asa* | *e Bili*} *hena=ia* *sa* *rereke*
D dog | 3SG | D Bill eat=3SG.OBJ ABS mango
'The dog/(s)he/Bill ate the mango.'

When the A argument appears post-verbally, it does not bear any determiner.

(10) *hena=ia* {*siki* | *asa* | *Bili*} *sa* *rereke*
eat=3SG.OBJ dog | 3SG | Bill ABS mango
'The dog/(s)he/Bill ate the mango.'

Dixon (1979) claims that if an ergative language only overtly marks one nominal type, it will be the ergative argument. Roviana presents a counterexample to this claim. In Roviana, the ergative argument is indicated by the lack of a case-marker – either just a determiner in pre-verbal positions, or by no marking at all in post-verbal positions. On the other hand, the absolutive argument is overtly marked by portmanteau forms incorporating the case-marking particle *si*.

2.2. Syntactic Ergativity

Roviana fronting phenomena display syntactic ergativity in that non-absolutive core arguments have access to a fronting operation which absolutive arguments do not have access to. The following is a characterization of the basic facts concerning two varieties of fronting in Roviana.

Firstly, Roviana demonstrates a fronting operation, available to all core arguments, in which a fronted NP is followed by the absolutive marker *si*, and then the gapped clause. An analysis of the syntactic structure of this type of fronting is beyond the scope of this paper. Thus it suffices to refer to it as "*si*-fronting". *si*-fronting for all core arguments is demonstrated in (11). Note that here and throughout, R stands for *ditransitive recipient/goal* and T stands for *ditransitive theme*.

(11) a. [*asa*]$_i$ *si* *hegere* GAP$_i$
3SG ABS laugh
'(S)he laughed.' S *si*-fronted

b. [*sa* *vivinei*]$_i$ *si* *ele* *toz=ia* *rau* GAP$_i$
ART story ABS PFT tell=3SG.OBJ 1SG
'the story, I already told.' P *si*-fronted

c. [*e* *Bili*]$_i$ *si* *korapa* *raro=a* GAP$_i$ *sa* *ginani*
PERS Bill ABS IMPERF cook=3SG.OBJ ART food
'Bill is cooking the food.' A *si*-fronted

d. [*koe* *Pita*]$_i$ *si* *ele* *vala=ia* *Zone* *sa* *heta* GAP$_i$
DAT.PERS Peter ABS PFT give=3SG.OBJ John ART betelnut
'To Peter, John gave the betelnut.' R *si*-fronted

e. [*na* *heta*]$_i$ *si* *ele* *vala=ia* *Zone* *koe* *Pita* GAP$_i$
ART betelnut ABS PFT give=3SG.OBJ John OBL.PERS Peter
'the betelnut, John gave Peter.' T *si*-fronted

The second fronting operation exclusively targets the A (transitive subject) and R (ditransitive recipient) arguments, excluding S, P, and T (ditransitive themes). The fronted argument is followed directly by the gapped clause, without any extra material, such as the absolutive particle *si*, employed in (11).

(12) a. [*asa*]$_i$ *tigisi=ia* GAP$_i$ *sa huneke*
3SG weave=3SG.OBJ ART hand.bag
'(S)he weaves the basket.' A null-fronted

b. [*koe Pita*]$_i$ *ele vala=ia Zone sa heta* GAP$_i$
DAT.PERS Peter PFT give=3SG.OBJ John ART betelnut
To Peter, John gave betelnut. R null-fronted

c. **asa puta*
3SG sleep
'(S)he slept.' *S null-fronted

d. **sa siki taka=ia Bili*
ART dog kick=3SG.OBJ Bill
'Bill kicked the dog.' *P null-fronted

e. **pa velvelu kote tosi=ni=go rau*
LOC afternoon FUT tell=APPL=2SG.OBJ 1SG
'In the afternoon, I will tell you.' *Obl null-fronted

To summarize, we posit the following generalization with respect to null-fronting.

(13) Null-fronting generalization:
Only non-absolutive core arguments are able to null-front.

We thus propose categorizing Roviana null-fronting as an instance of an 'anti-absolutive' extraction phenomenon, as it targets core arguments to the exclusion of S and P. In the declarative cases above, either *si*-fronting or null-fronting are able to apply if the extracted argument is A or R. However, we find that in *wh*-questions, null-fronting is the preferred strategy for A as in (14-b) and R as in (14-c).

(14) a. *esei* *(*si*) {*taloa* | *taka=ia Bili*?}
who ABS leave kick.3SG.OBJ Bill
Who {left | did Bill kick}?

b. *esei* (**si*) *hena=ia sa rereke*?
who ABS eat.3SG.OBJ ART mango
Who ate the mango?

c. *koesei* (**si*) *vala=(n)ia Zone na heta*
who.DAT ABS send=3SG.OBJ John ART betelnut
Who did John give the betelnut to?

For either type of fronting, null- or *si*-, how do we know that they should be classified as *wh*-extraction? We find the following evidence: both kinds of fronting are able to cross clause boundaries, and both are subject to island constraints. The following data show *wh*-question formation from an embedded clause. We leave the precise

analysis of *wh*-extraction as a topic for future work, though we note that in the case of *si*-fronting in (16), the *si*-marker is stranded in the embedded clause rather than the matrix clause, suggesting *si*-fronting takes place locally, feeding long distance *wh*-movement. An analogous analysis is plausible for null-fronting in (15), but we lack convincing evidence at this stage that null-fronting has applied locally within the embedded clause before fronting to the matrix position.

(15) Null-fronting from an embedded clause

a. *esei*$_i$ *balabala=n=ia* *agoi* [GAP$_i$ *hena=ia* *sa* *rereke*?]
who think=APPL=3SG.OBJ 2SG eat=3SG.OBJ ART mango
Who do you think ate the mango?

b. *koesei*$_i$ *balabala=n=ia* *agoi* [GAP$_i$ *vala=ia*
who.DAT think.PROG=APPL=3SG.OBJ 2SG give=3SG.OBJ
Zone sa *heta*?]
John ART betelnut
To whom do you think John gave the betelnut?

(16) *si*-fronting from an embedded clause

a. *esei*$_i$ *balabala=n=ia* *agoi* [GAP$_i$ *si* *taloa*]?
who think=APPL=3SG.OBJ 2SG ABS leave
Who do you think left?

b. *esei*$_i$ *balabala=n=ia* *agoi* [GAP$_i$ *si* *taka=ia* *Bili*]?
who think=APPL=3SG.OBJ 2SG ABS kick=3SG.OBJ Bill
Whom do you think Bill kicked?

In further support of the analysis of *si*-fronting and null-fronting as *wh*-movement, we find that they are subject to island effects. Neither type of fronting is permitted out of an adjunct island, for example.

(17) **esei ele kamo si goi mudina ngaza=au* [GAP]?
who ASP arrive ABS you after hugged=1SG
*Who did you arrive after hugged me?

When a *wh*-word appears within a temporal adjunct clause, we find that a *wh*-in-situ strategy is employed.

(18) *Kamo mae si rau* [*mudina taloa se esei*]?
arrive come ABS 1SG after leave ABS who
I arrived after *who* left?

The evidence above suggests that both null-fronting and *si*-fronting fall into a class of *wh*-movement. Like the West Greenlandic examples in (1), we find that null-fronting is an instance of *wh*-movement constrained by an ergative-absolutive aligned pattern. West Greenlandic relative clause forming movement patterns in the familiar direction, anticipated by Polinsky's definition of *Syntactic Ergativity* in (2): the A argument is blocked from undergoing the relevant type of movement, while

the S and P arguments are not. The case of Roviana null-fronting presents an interesting constrast. Here we find that S and P are blocked from undergoing this type of movement, while A is not blocked.

Our goal is to refine a notion of syntactic ergativity which permits 'anti-ergative' extraction phenomena like West Greenlandic relative clause formation, but is flexible enough to allow for 'anti-absolutive' extraction phenomena like Roviana null-fronting.

3. Approaches to Extraction Restrictions

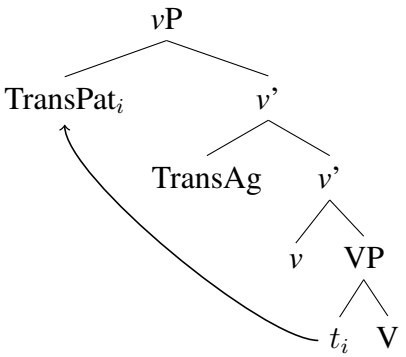
In this section we review some previous approaches to syntactic ergativity, and discuss whether each is general enough to handle the Roviana null-fronting data. We argue that 'extraction based' approaches, i.e., those which derive syntactic ergativity by inverting the relative positions of the A and P arguments are not generalizable to 'anti-absolutive' extraction patterns like Roviana null-fronting. We find that feature-based approaches like Otsuka (2006, 2010) and Deal (2016) are better equipped to handle the Roviana pattern.

3.1. Inversion-based Approaches

A prominent way of understanding syntactic ergativity involves the movement of the P argument to a position higher than the A argument. We label these types of analyses as 'inversion-based approaches', see e.g., Aldridge (2004); Coon et al. (2015) and others.

For a variety of proposed reasons, the higher position of P, due to 'inversion', blocks the extraction of A. As P is structurally higher, P is not blocked from extracting. The structure below is an example of this flavor of analysis. Here, P raises from its VP-internal position to a higher Spec,*v*P.

(19)



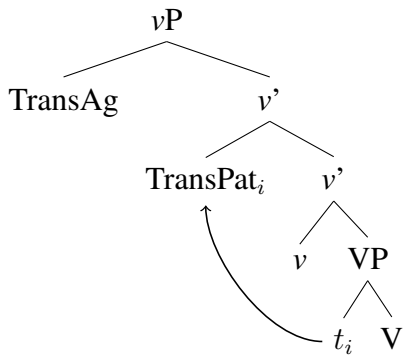
Why does the movement of P imply that the extraction of A is blocked? Several explanations have been proposed. For example, according to Campana (1992), P intervenes between A and its potential landing site, preventing A from establishing the required relationship with the landing site. Another approach, see, e.g., Aldridge (2004), is that in its derived position, P occupies the "escape hatch" of the *v*P phase.

This means that P occupies a position which A must traverse through in order to move to an even higher position. Another phase-based approach (e.g., Coon et al. (2015)) holds that, in its derived position, P is outside the phase boundary is is thus accessible to movement, while A remains inside the boundary and thus cannot establish a syntactic relationship with anything outside the phase.

But inversion-based approaches come bundled with some theoretical problems. Firstly, following a point raised by Assmann et al. (2015), under inversion based approaches, it is a mystery why P-movement doesn't seem to block the movement of *all* *v*P-internal material. If P-movement blocks the only route out of the *v*P, why are other arguments and obliques besides A able to move? Furthermore, as Polinsky (2016) points out, evidence for proposed P-movement isn't always apparent in syntactically ergative languages, often requiring stipulation of covert inversion, as in Aldridge (2004).

Moving more specifically to Roviana, we argue here that inversion-based approaches do not easily extend to the Roviana null-fronting phenomenon, regardless of the explanation of why inversion blocks the movement of A. Recall from §2.2 that in Roviana, both S and P are blocked from undergoing null-fronting, not A. Thus, Roviana null-fronting could be characterized as the reverse of the traditional syntactically ergative pattern in which A is blocked from moving. One potential approach in order to block the movement of P is to simply require that A moves to a position above P: just as P blocks the movement of A in (19), A would block the movement of P.

(20)



But this approach does not obviously extend to intransitive sentences, in which S is blocked from moving. As S is the only argument in an intransitive sentence, the inversion-based approach leaves it open as to why S is blocked from moving in (21).

(21) **asa puta*
3SG sleep
'(S)he slept.' *S null-fronted

Even more problematic, phase-based accounts of syntactic ergativity, such as the account in Coon et al. (2015), propose that intransitive clauses do not impose phase-based restrictions on the movement of S. This is necessary in order to draw a syn-

tactic distinction between intransitive and transitive subjects which ensures that (in classical syntactically ergative patterns) S is allowed to move, while A isn't.

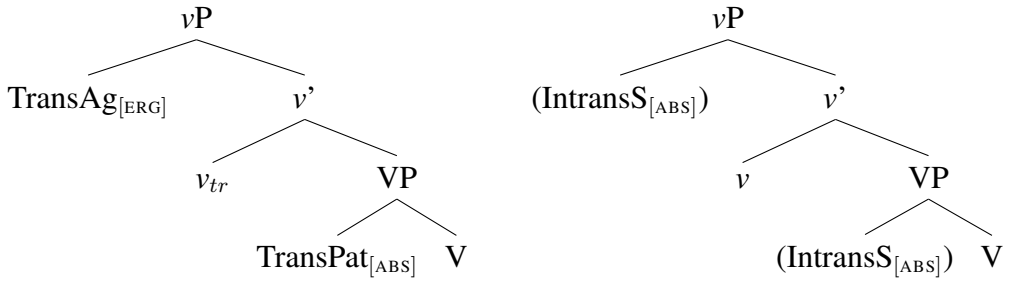
For these reasons we argue that inversion-based approaches to syntactic ergativity do not extend easily to 'anti-absolutive' extraction patterns like Roviana null-fronting, without unmotivated stipulation.

3.2. Case-based Approaches

An alternative approach to syntactic ergativity holds that extxraction phenomena are sensitive to abstract Case features. These Case features are convenient ways of labelling an argument's grammatical relation. In general, they are assigned based on the argument's syntactic position, e.g., under the c-command domain of a particular functional head (see especially Legate (2008). Alternatively, Case features could be assigned configurationally, based on whether or not the argument c-commands a co-argument, as in Deal (2016).

According to Otsuka (2006), syntactic ergativity in Tongan is best handled using this sort of case-based approach. For Otsuka, A'-extraction phenomena in Tongan are 'case-sensitive'. This means that in order to undergo A'-movement in Tongan, an argument must have a requisite abstract Case feature. These features are assigned within the syntax proper (e.g., Aldridge (2004); Legate (2008)). An example illustration of this system is in (22). On the left, an abstract feature [ERG] is assigned to the argument occupying Spec,*v*P headed by v_{tr}. Thus the feature [ERG] picks out the transitive agent. The abstract feature [ABS] is assigned to other *v*P internal arguments, i.e., S and P.

(22)



Under the case-based approach, extraction operations target Case features. In a classically syntactically ergative language like West Greenlandic, relative clause formation targets the feature [ABS] only. Relative clause formation with A is ruled out simply because A bears the wrong Case feature [ERG]. Under this kind of approach, the link between ergativity in extraction patterns and ergativity in morphological case-marking is clear: both phenomena target abstract Case features such as [ERG] and [ABS] which are determined by the underlying argument structure.

Applying the case-based approach to Roviana is relatively trivial. Recall that in *wh*-questions, S and P must be *si*-fronted, while A and R must be null-fronted.

(23) a. [*esei*]$_{S/P}$ *(*si*) {*taloa* | *taka=ia* *Bili*}
who ABS left kick=3SG.OBJ Bill
'Who left/Who did Bill kick?' *si* fronting S/P

b. [*esei*]$_A$ (**si*) *hena=ia* *sa* *rereke*
who ABS eat=3SG.OBJ ART mango
'Who ate the mango?' null fronting A

c. [*koesei*]$_R$ (**si*) *vala=ia* [*Zone*]$_A$ [*sa* *heta*]$_P$
who.DAT ABS give=3SG John ART betelnut
Who did John give the betelnut to? null fronting R

Implementing this style of analysis under a case-based account, we can propose that the two fronting operations are sensitive to Case features as in (24). This ensures that S and P (bearing [ABS]) are only targeted by *si*-fronting, while A and R (bearing [ERG] or [DAT]) are only targeted by null-fronting.

(24) Case-based account of Roviana
a. *si*-fronting targets [ABS][1]
b. null-fronting targets [ERG] $\vee$ [DAT]

This approach accounts for the basic observations. However, we argue that this approach could be streamlined by removing the disjunction in (b) in (24). We argue that morphological phenomena like case and agreement, as well as syntactic phenomena like extraction, are sensitive to abstract features just like the accounts illustrated in this subsection. However, we argue that the relevant features are more general than abstract Case features and can be featurally decomposed using the approach to grammatical relations and argument structure outlined in Kiparsky (1997).

4. A Streamlined Approach to Grammatical Relations

Like the case-based approach, our approach holds that extraction operations are sensitive to abstract features borne by nominal arguments. Unlike Otsuka's approach, these features do not correspond to cases (e.g., ergative, absolutive, nominative). Instead we propose a new category of more basic *grammatical relations* features. Under our analysis, both morphological phenomena like case and syntactic phenomena like extraction are sensitive to grammatical relations (GR) features.

4.1. Grammatical Relations Features

We take GR features to be assigned configurationally, i.e., based on the structural position of the nominal in relation to its co-arguments. In this respect, GR features are like case features under the system of Marantz (1991), though we take GR features

[1]At least for *wh*-questions. In declaratives, any core argument can *si*-front. We take the heterogeneity of *si*-fronting as further evidence against an inversion based approach to syntactic ergativity, following Polinsky (2016).

to be assigned in the syntax proper, and thus accessible to syntactic operations such as extraction.

Following the feature system outlined in Kiparsky (1997), we assume two types of GR features. The first determines whether or not the argument is the thematically highest argument, [±HR]. The second determines whether or not the argument is the thematically lowest argument, [±LR].

Kiparsky takes these features to be assigned by the subsystem governing thematic roles, and under his assumptions, they bear no fixed relationship to phrase structure. Under our system, the GR features *are* sensitive to phrase structural notions, in particular, c-command. This is a natural consequence of working in a syntactic framework in which thematic roles are associated with structural positions (e.g., agents in Spec,*v*P and patients in Comp,VP), and the thematic hierarchy roughly corresponds to relative structural height.

The assignment of features is clause-bound, and governed by these rules:

(25) Assigning highest role features: [−HR]/[+HR]

a. To any DP c-commanded by another DP, assign [−HR].
b. Elsewhere, i.e., if there is no c-commanding DP, assign [+HR].

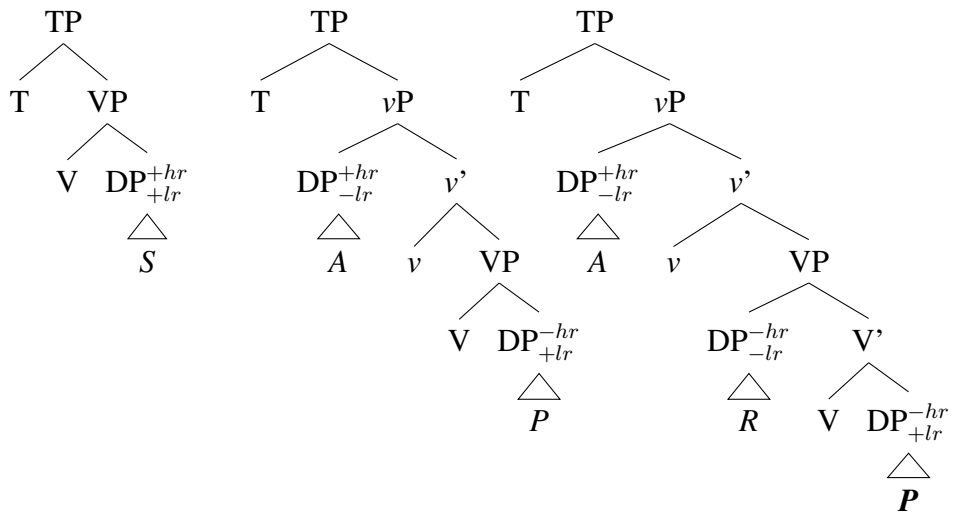
(26) Assigning lowest role features [−LR]/[+LR]

a. To any DP c-commanding another DP, assign [−LR].
b. Elsewhere, i.e., if there is no c-commanded DP, assign [+LR].

Crucially, these features are assigned to a nominal in its underlying position, i.e., the position at which it is merged. This is in order to ensure the features are not replaced or revised if the nominal undergoes an operation such as A'-extraction.

Below is a general schema for the assignment of GR features in an intransitive clause, a transitive clause, and a ditransitive clause.

(27)



With these associations of grammatical relations and feature combinations, we can uniquely identify grammatical relations in terms of feature combinations, as in (28):

(28)

GR	feature combo
S	$[+\text{HR}, +\text{LR}]$
A	$[+\text{HR}, -\text{LR}]$
P	$[-\text{HR}, +\text{LR}]$
R	$[-\text{HR}, -\text{LR}]$

We can also provide formal definitions for some core syntactic concepts:

(29) a. Subject: a DP bearing $[+\text{HR}]$
b. Object: a DP bearing $[-\text{HR}]$
c. Indirect object: if it also bears $[-\text{LR}]$
d. Direct object if it also bears $[+\text{LR}]$

A requirement that all clauses have subjects amounts to a requirement that all clauses bear a DP with a $[+\text{HR}]$. By the definitions in (25), this is an automatic consequence of any clause with a DP argument. Thus any clause with at least one DP argument will have a subject by our terminology.

4.2. Linking Features with Phenomena

GR features are associated with the thematic positions of DPs. They are assigned within the narrow syntax. Thus GR features allow morpho-syntactic operations to be sensitive to the thematic properties of the DP. For example, we take the system responsible for morphological case to reference GR features. This approach is roughly similar to the approach taken in Aldridge (2004); Otsuka (2006); Legate (2008) and so on, although where they use abstract Case features (like $[\text{ERG}]$ and $[\text{NOM}]$) for this goal, we use GR features like $[+\text{HR}]$ and $[-\text{LR}]$.

In Roviana, we take morphological case marking to be determined by the rules in (30). Further, we take these rules to apply in order. When one nominal takes morphological case marking by application of one of these rules, it is inaccessible for further m-case marking. According to (a), the structurally lowest DP is marked with absolutive *si*. Subsequently, a non-highest argument is marked with dative *koa*.

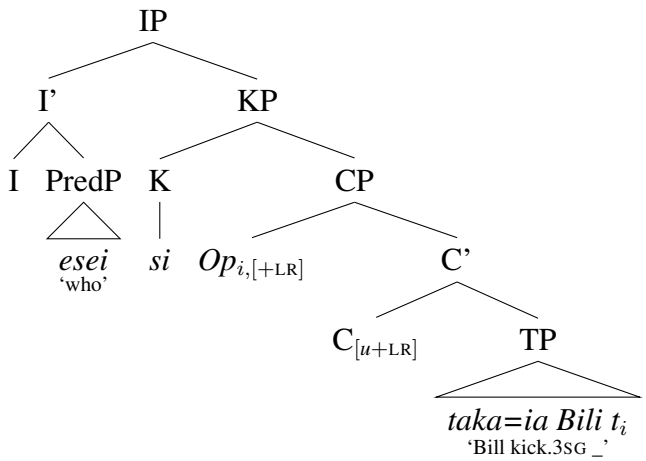
(30) a. $[+\text{LR}] \Rightarrow /si/$
b. $[-\text{HR}] \Rightarrow /koa/$

Although the P-argument (transitive patient) is also non-highest and thus marked $[-\text{HR}]$, it is not assigned dative by virtue of rule (a) applying before rule (b). We also note that no rule governs ergative morphological case. The remaining core argument, i.e., the transitive agent, is not assigned an overt case marker. This accounts for the lack of ergative m-case marking in Roviana.

Now we can move to the fronting phenomena under discussion. As stated above, we will leave the structural analysis of *si*-fronting and null-fronting as a topic for later work. For now, we can account for the argument structural sensitivity of the fronting operations. In (31) below, we analyse *si*-fronting as a cleft structure, though nothing crucial hinges on this. The function head responsible for the fronting

operation, C in (31), is specified to attract only [+LR]-marked arguments. This is represented below by the feature $[u +$ LR$]$ on C. This feature determines that a DP bearing [+LR] must be fronted to C's specifier position. Below, this requirement is satisfied by the covert pronoun binding the gap in the direct object position.

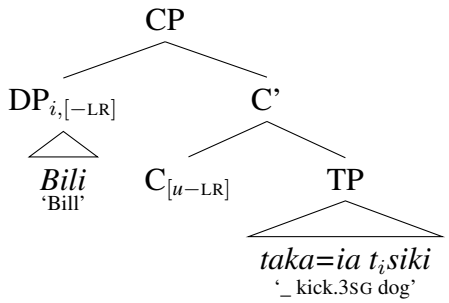
(31) Example implementation (tentative analysis): *si-fronting as clefting*



The classical syntactically ergative pattern, such as the one demonstrated by West Greenlandic relativization, should be specified to attract only [+LR] arguments.

In contrast to *si*-fronting in (31), Roviana null-fronting is tentatively analyzed as regular (non-cleft) A'-movement. Roviana null-fronting, as discussed in §2, can only apply to *non-absolutive core arguments*. Thus the functional head responsible for null-movement, C in (32), is specified to trigger the movement of [−LR] nominals only.

(32) Tentative analysis: *null-fronting as ordinary A'-mvt*



This featural specification ensures that only non-absolutive core arguments move. The feature [−LR] specifically picks out non-lowest core arguments, i.e., A and R – the arguments able to undergo null-fronting in Roviana. We thus eliminate the need for a disjunction which was required under the Case-based approach. Under the latter approach, C would have to be specified to attract [ERG] ∨ [DAT].

A key reason to switch to the more abstract GR features over abstract Case features is that we have a more elegant account of phenomena which appear sensitive to grammatical relations but not morphological case. For example, in Roviana, direct objects are co-indexed by a pronominal clitic attached to the right edge of the verbal complex.

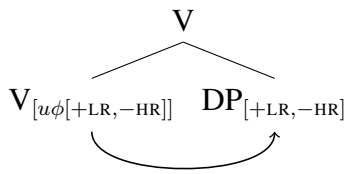
(33) a. *mae(*=ia) si asa*
come=3SG.OBJ ABS 3SG
'She/he comes.' Intransitive VS

b. *taka*(=ia) Bili sa siki*
kick=3SG.OBJ Bill ART dog
'Bill kicked the dog.' Transitive VAP

Thus the object clitic is sensitive to direct objecthood. In order to specify a rule for object clitics which references abstract Case features, we would need access to a [ACC] feature. But Roviana does not demonstrate an accusative morphological case, weakening the evidence one might want to posit an abstract [ACC] feature. We similarly wouldn't want the rule governing the object clitic to reference an [ABS] feature, as this would wrongly predict that the object clitic should agree with intransitive subjects.

An alternative approach is that the object clitic is sensitive to GR features. It specifically seeks the P argument by virtue of being specified to agree with the DP bearing the $[+\text{LR}, -\text{HR}]$ feature. We therefore correctly model the observation that object clitics never agree with A, R, or S.

(34) *object clitics ϕ-agree with direct objects*



Thus, operations which target GRs but not case are independently necessary for Roviana.

5. The Ergative Parameter

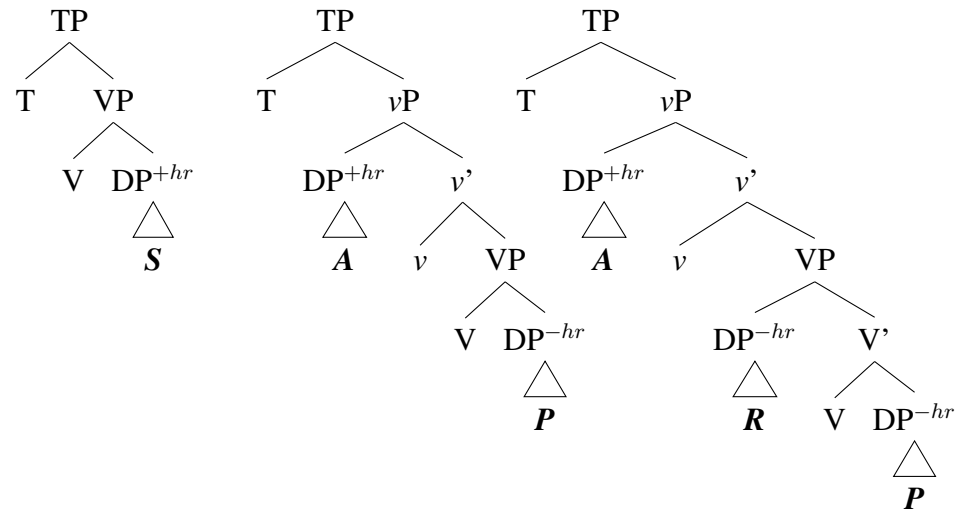
There is a crucial generalization that ought to be factored into any theory of ergativity, that is, that no morphologically accusative language seems to demonstrate syntactic ergativity (see Dixon (1979)). For example, a nominative-accusative language such as Japanese will not show an extraction restriction which targets only S and P.

So far, there is nothing in this paper's system which prevents "absolutive-only" extraction rules in a morphologically accusative language, such as German. For example, in our system, we could posit a language which assigns an accusative m-case to $[-\text{HR}]$ arguments, while simultaneously demonstrating A'-movement phe-

nomena which targets [+LR]. This would result in a language with accusative-alignment in the morphological case, but syntactic ergativity in A'-movement. To curb this, we suggest a new perspective on the so-called "ergative parameter". We propose that *ergative languages are those with* [±LR] *features*.

(35) below provides a sketch of a language without [±LR] features. In such a language, S and A are not able to be distinguished via GR features. Both are marked [+HR]. Moreover, S and P are not featurally grouped. S is [+HR] and P is [−HR]. Thus such a language cannot define an "absolutive-only" extraction operation, or morphological case-marking rule. We also note that P and R are not distinguished via GR features here. This doesn't mean they can't be distinguished in other ways however, for example, by any rule which references their relative positions or thematic roles. Under this analysis, a nominative-accusative language like Japanese could be categorized as a [±HR]-only language, and therefore not define any "absolutive-only" morpho-syntactic rules.

(35)



Under this analysis, 'ergative languages' are languages with both [±HR]-features and [±LR]-features, and are thus more featurally complex than [±HR]-only languages. Under this approach, we have a clear understanding of why ergative-absolutive aligned languages seem to demonstrate strictly more options when it comes to ergative or accusative aligned phenomena. For example a language like Samoan might demonstrate an ergative-absolutive aligned morphological case-marking system, but a nominative-accusative aligned agreement system.

This is still not enough for our purposes. Nothing stops us from positing a language with both [±HR]-features and [±LR]-features, which demonstrates a nominative-accusative aligned case-marking system (using the [±HR]-features), as well as an ergative-absolutive aligned extraction or agreement system (using the [±LR]-features). Such a language is to our knowledge unattested. This is because nothing in our proposal so far singles out morphological case marking as special in this respect.

To rule out this possibility, we propose the following principle:

(36) The 'use it or lose it' principle on m-case:
Ergative languages must impose an m-case rule of the format:
$[\pm\text{LR}] \Rightarrow X$
where X is some (possibly empty) string

By 'ergative languages' we mean languages with both $[\pm\text{HR}]$-features and $[\pm\text{LR}]$-features. If a language has both types of features, at least one rule must reference the $[\pm\text{LR}]$-features. Such a rule amounts to a morphological case attaching to non-lowest arguments (like ergatives), or lowest arguments (like absolutives). This ensures that if a language has ergative-absolutive alignment *anywhere* in its grammar, it must demonstrate it in its morphological case marking system.

One could think about (36) in terms of parameter setting. A language learner will be faced with the choice as to whether to posit $[\pm\text{LR}]$-features (yielding an ergative-aligned language) or not (yielding an accusative-aligned language). The principle in (36) determines that the morphological case system will be the deciding factor: if a language doesn't demonstrate ergative-alignment in its m-case system, it will not demonstrate it elsewhere. Absent such evidence, the learner will posit a system using only $[\pm\text{HR}]$ features, as in (35).

6. Conclusion

We argue that the anti-absolutive restriction observed in Roviana bears on our understanding of syntactic ergativity. The phenomena we have observed biases against an 'inversion'-based account of ergativity. Also, it is well suited to a feature-based account, such as one that targets features marking grammatical relations. Furthermore, we propose a new understanding of syntactic ergativity, one that involves signaling an argument's grammatical relations featurally.

Our approach aims to shed light on several interconnected topics. Firstly, we posit a featural system which is accessible to both morphological and syntactic rules. Secondly, we should how such a system can explain syntactic phenomena which are sensitive to argument structure. Finally, we explain how syntactically ergative extraction phenomena appear to be systematically linked to morphological case: under our approach both morphological case and syntactically ergative extraction phenomena are sensitive to underlying abstract features representing a nominal's grammatical relation.

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