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Syntax and Typology of Ergativity

1. Introduction

Syntactic ergativity has always posed a particular challenge for Generative theory. This is primarily due to the lack of correspondence between grammatical function and case-marking. Put in other words, the problem lies in how to identify a grammatical function of subject. In early work on ergativity, principally Dixon (1972, 1979, 1994) and Marantz (1981, 1984), absolutives were assumed to have the basic properties of subjects. Dixon presented evidence from coordination and A'-movement in Dyirbal which he claimed showed the absolutive nominal to exhibit parallel behavior with subjects in accusative languages. Based on this data and argumentation, Marantz then proposed an analysis in which the absolutive DP is base-generated outside of VP, in external argument position.

More recently, however, in light of evidence from additional ergative languages that ergative nominals are not completely devoid of subject properties, Murasugi (1992), Campana (1992), Bittner (1994), Bittner and Hale (1996a, 1996b), Ura (2000), and others have proposed analyses which allow case-checking to be separated from other subject properties. All of these analyses base-generate the ergative DP in external argument position, allowing it the privilege of c-commanding all other nominals in their base positions, while associating absolutive case with subject position.

This latter approach is indeed an improvement over the earlier assumption that the absolutive is the exclusive bearer of subject properties. However, this view is still overly simplistic. Not only is it the case that ergative languages have no single grammatical function corresponding exactly to subject, there is also significant variation among different syntactically ergative languages as to how subject properties are distributed between the ergative and absolutive nominals. In this paper, I propose a typology of ergativity based on the distribution of subject properties between ergative and absolutive DPs. I show that these subject properties are derived through two means. Association of absolutive case with T accounts for some of these properties. Others are the result of structural configuration, by virtue of that DP residing in the highest A-position of the clause (either [Spec, *v*P] or [Spec, TP]).

Specifically, I propose that there are two types of syntactically ergative language, which are distinguished on the basis of the roles assigned to T and *v* in structural case-checking. In one type of ergative language, absolutive case is checked by T in intransitive clauses but by *v* in transitive clauses. I refer to this type as *v*-type ergativity. In *v*-type languages, properties generally attributed to subjects in accusative languages are assumed by external arguments, i.e. ergative DPs in transitive clauses. For example, ergative DPs can antecede reflexives and function as imperative or hortative addressees. Controlled PRO in a nonfinite clause can also appear in the position for the external argument in a transitive clause. This is because the absolutive DP in a transitive clause remains in its base position inside VP and checks it case with *v*. The ergative DP, on the

other hand, is merged in [Spec, *v*P] external argument position and c-commands the absolutive.

In the other type of ergative language, T checks absolutive case in both transitive and intransitive clauses. In these T-type ergative languages, absolutive DPs have more subject properties than in *v*-type languages. For example, controlled PRO can only appear in absolutive position and never in ergative position. This is because nonfinite T does not have an absolutive case feature; absolutive case is therefore not available for checking with an overt DP. I will show in this paper that Eskimo languages, the Australian languages Dyirbal and Warlpiri, and Ixil Mayan are *v*-type languages, while Mam and Jacaltec Mayan languages and the Austronesian language Seediq display T-type ergative syntax.

In addition to the two types of ergative language based on the roles of T and *v* played in checking absolutive case, I introduce a second parameter: whether T has an EPP feature. I will show below that Dyirbal is a *v*-type ergative language with respect to case-checking. However, absolutives in this language display greater subject-like behavior than in most other *v*-type or T-type languages. These properties can be accounted for by positing that T in Dyirbal has an EPP feature, which draws the absolutive DP to its specifier, effectively placing this nominal in subject position in the clause.

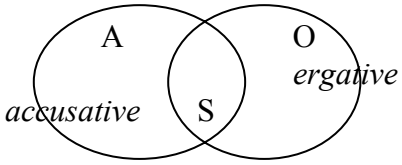
Common to all syntactically ergative languages is the fact that only absolutives are eligible to undergo certain syntactic operations, which are essentially subsumed under the rubric of A'-movement. I propose a novel account of this phenomenon in the theory of Multiple Spell-Out. Specifically, I propose that *v* can host an EPP feature only in transitive clauses. This EPP feature attracts a VP-internal absolutive to the *v*P phase edge, from where it undergo further movement to [Spec, CP]. In intransitive clauses, for example in an antipassive, *v* does not have an EPP feature, ensuring that obliques cannot move out of VP without violating the Phase Impenetrability Condition. I further show how movement of ergative DPs is prevented by employing Fox and Pesetsky's (2004) Cyclic Linearization.

The paper is organized as follows. Sections 2 and 3 introduces the general syntactic behavior of absolutive and ergative nominals. Section 4 summarizes and critiques previous Generative analyses of syntactic ergativity. In section 5, I propose the analyses of *v*-type and T-type ergativity and show how parametrizing the roles of T and *v* in absolutive case-checking and the EPP feature on T in Dyribal derive the distribution of subject properties between ergative and absolutive DPs in different languages. In section 6, I turn to the absolutive restriction on A'-extraction. I additionally show how the analysis of the extraction facts derives an interpretive asymmetry commonly observed between absolutive and non-absolutive direct objects.

2. Properties of Absolutives

Dixon (1979, 1994) proposes that the fundamental difference between syntactically accusative and syntactically ergative languages is the way in which primitive grammatical roles are aligned with respect to certain syntactic functions. The primitives Dixon identifies are: transitive subject (A), transitive object (O), and intransitive subject (S). In accusative languages, A and S roles share certain properties, distinct from O, while in ergative languages it is S and O which pattern together.

(1)



Syntactically ergative languages display this pattern in two ways. On the morphological level, this pattern is observed in the case-marking pattern of the language. In an ergative language, an intransitive subject is marked the same way as a transitive direct object (absolutive), while a transitive subject (ergative) is indicated differently. The absolutives in the following Dyirbal examples are zero-marked, while the ergative is suffixed with *-nggu*.

Dyirbal (Dixon 1994:161)

(2)a. yabu banaga-n^{y}u
mother.Abs return-Nonfut
"Mother returned."

b. nguma yabu-**nggu** bura-n
father.Abs mother-Erg see-Nonfut
"Mother saw father."

Absolutive marking in Yup'ik Eskimo is *-(a)q*. The ergative DP takes *-m*.

Yup'ik (Payne 1982:77)

(3)a. Pam-**aq** mayu-llru-u-q.
Pam-Abs climb-Past-Intr-3s
"Pam climbed up."

b. Yero-**m** Dena-**q** tange-llru-a-0.
Yero-Erg Dena-Abs see-Past-Tr-3s/3s
"Yero saw Dena."

The Mayan language Mam shows agreement for ergative and absolutives DPs on the verb. Third-person singular absolutive agreement is null. Ergative agreement appears as a prefix on the verb.

Mam (England 1983:182-3)

(4)a. ma **0**-kyim xiinaq
Rec 3s.Abs-die man
"The man died."

b. ma-a7 **0**-tzaj **ky**-q'o-7n pwaq q-ee
Rec-Emph 3sAbs-dir 3pErg-give-ds money 1p-RN/Dat
"They gave us the money."

In the Austronesian language Seediq[1], the intransitive subject in (5a) and the transitive object in (5b) follow the absolutive marker *ka*, while the transitive subject in (5b) takes the ergative marker *na*.

Seediq

(5)a. Wada kudurjak **ka** qedin=na.
Past flee Abs wife=3s.Gen
"His wife ran away."

b. Wada bube-un **na** Pihu **ka** dangi=na.
Past hit-Tr Erg Pihu Abs friend=3s.Gen
"Pihu hit his friend."

In Seediq, case distinctions are also registered on clitic pronouns. Both the ergative and absolutive arguments appear in clitic form in the transitive clauses in (6).

Seediq

(6)a. Wada=**ku**=**na** bube-un.
Past=1s.Abs=3s.Erg hit-Tr
"He/she hit me."

b. Wada=**ku**=**na** s-bari hulama.
Past=1s.Abs=3s.Erg App-buy treat
"He/she bought me a treat."

Absolutive clitics appear alone in antipassive and other intransitive clauses.

Seediq

(7)a. Wada=**ku** beebu Pihu.
Past=1s.Abs hit.Intr Pihu
"I hit Pihu."

b. Wada=**ku** m-ari hulama laqi.
Past=1s.Abs Intr-buy treat child
"I bought a treat for the child."

c. Maha=**ku** Taihoku.
will.go=1s.Abs Taipei

[1] Seediq is an Atayalic language spoken in central Taiwan. All the Seediq data in this paper were collected in the field by the author. Alternative analyses of this language can be found in Holmer (1996) and Chang (1997).

"I will go to Taipei."

In addition to ergativity at the morphological level, in syntactically ergative languages, the S/O grouping is extended to certain syntactic operations, which fall under the rubric of A'-movement. For example, relative clauses can be formed only on absolutives in Dyirbal. The sole argument of an intransitive verb can be relativized in (8a). In order to relativize a transitive agent, the clause has to antipassivize, as in (8b).

Dyirbal (Dixon 1994:169-70)

(8)a. nguma$_i$ [e_i banaga-ngu] yabu-nggu bura-n
father.Abs return-Rel.Abs mother-Erg see-Nonfut
'Mother saw father, who was returning.'

b. yabu$_i$ [e_i bural-nga-ngu nguma-gu] banaga-nyu
mother.Abs see-AP-Rel.Abs father-Dat return-Nonfut
"Mother, who saw father, was returning."

The same is true in Eskimo languages such as Yup'ik and West Greenlandic. In the transitive clauses below, only the absolutive internal argument can be relativized, not the external argument.

W. Greenlandic (Manning 1996:84)

(9)a. nanuq Piita-p tuqu-ta-a
polar.bear.Abs Piita-Erg kill-Tr.Part-3s
"a polar bear killed by Piita"

b. *angut aallaat tigu-sima-sa-a
man.Abs gun.Abs take-Perf-Rel.Tr-3s
"the man who took the gun"

England (1983) shows the same characteristic in Mayan languages. Transitive patients, as in (10a), but not transitive agents, as in (10b), can be extracted in constituent questions. In order to extract a transitive agent, the clause must be antipassivized, as in (10c).

Mam (England 1983:250-1)

(10)a. alkyee-qa x-hi tzaj t-tzyu-7n Cheep
who-Pl Rec.Dep-3p.Abs Dir 3s.Erg-grab-Ds Jose
"Whom did Jose grab?"

b. *alkyee saj t-tzyu-7n kab' xiinaq
who Rec.Dep.3s.Abs.Dir 3s.Erg-grab-Ds two man
"Who grabbed the men?"

c. alkyee saj tzyuu-**n** ky-e kab' xiinaq
who Rec.Dep.3s.Abs.Dir grab-AP 3p-Rn two man
"Who grabbed the men?"

Craig (1977) notes that relativization or *wh*-movement of intransitive subjects or transitive objects can take place directly in Jacaltec. Movement of a transitive subject, however, must be accompanied by the antipassive suffix *-ni* on the verb.

Jacaltec (Craig 1977:14)

(11)a. mac xul ewi
who came yesterday
"Who came yesterday?"

b. mac xawila
whom you.saw
"Whom did you see?"

c. mac xcach mak-**ni**
who you hit-Suff
"Who hit you?"

In the Seediq relative clauses in (12), the absolutive internal argument can be relativized but not the ergative external argument.

(12)a. **sapah** s-n-malu na tama
house -Perf-build Erg father
"house which Father built"

b. ***seediq** s-n-malu ka sapah
person -Perf-build Abs house
"person who built the house"

In section 5, I propose that there are two types of syntactically ergative language, based on the roles played by T and *v* in absolutive case-checking. The two types of language differ in terms of how subject properties are distributed between ergative and absolutive DPs, but both approaches yield the ergative/absolutive case pattern observed in this section. In section 6, I present a unified analysis of the A'-movement restriction.

3. Subject Properties of the Ergative DP

Absolutives have the syntactic privilege of being able to undergo A'-movement. Syntactic behavior generally attributed to subjects, however, is displayed by ergative DPs in transitive clauses. For example, an ergative DP can antecede a reflexive, which may be the absolutive direct object or another VP-internal element. In the West Greenlandic example in (13), the ergative antecedent binds a reflexive oblique. In the Quiche example, in (14), the ergative DP antecedes a reflexive in absolutive position.

W. Greenlandic (Manning 1996:126)

(13) **Junna-p** Kaali *immi-nik* uqaluttuup-p-a-a.
Junna-Erg Kaali.Abs self-Mod tell-Ind-Tr-3s
"Junna$_i$ told Kaali about himself$_i$."

Quiche Mayan (Larsen & Norman 1979:349)

(14)	x-0-u-kamsa-j	*r-iib'*	**lee**	**achih**
	Compl.3s.Abs-3s.Erg-kill-Suff	3s-self	the	man
	"The man killed himself."			

Ergatives function as imperative or hortative addressees. The following Yup'ik and Dyirbal examples are imperatives. The Seediq example is a hortative example.

Yup'ik (Payne 1982:90)

(15) Ner-**ci**-u!
eat-2p-3s
"You all eat it!"

Dyirbal (Dixon 1972:111)

(16) nginda bayi yara balga
you man hit
"You hit the man!"

Seediq

(17)a. Ha-e=**ta**$_j$ p-heyu e_j.
go-Hort=1p.Erg Caus-stand
"Let's go stand (them$_j$) up!"

b. Burig-e=**ta**$_j$ e_j.
sell-Hort=1p.Erg
"Let's sell (them$_j$)!"

Controlled PRO, which is restricted to subject position in accusative languages, can occur in the ergative slot in some languages.

W. Greenlandic (Manning 1996:124)

(18)	Miiqqat	[PRO	Juuna	ikiu-ssa-llu-gu]	niriursui-pp-u-t.
	children.Abs	[(Erg)	Juuna.Abs	help-Fut-Inf-3s]	promise-Ind-Intr-3p
	"The children promised to help Juuna."				

From the discussion sections 2 and 3, it is clear that both absolutive and ergative DPs display some characteristics of subjects. Ergative DPs can bind reflexives and serve as imperative addressees. PRO also can occur in the position for an ergative DP in a transitive nonfinite clause. As we saw in the preceding section, absolutives behave like subjects primarily in terms of case-marking; absolutive is the default case, i.e. the obligatory case in the sense of Bobaljik (1993). Absolutives also have the privilege of being the only DP argument able to undergo A'-movement.

4. Previous Analyses

Given that absolutive DPs exhibit certain syntactic privilege in syntactically ergative languages, there is a tendency in Generative linguistics to identify absolutives as

subjects. One early analysis is that proposed by Marantz (1981, 1984) and developed by Levin (1983), where agent and theme theta role assignment is switched. The agent role is assigned directly by the verb, while the theme is assigned by the predicate as a whole, the opposite of what happens in an accusative language.

(19)a. Accusative Language
agent roles: assigned by predicates
theme/patient roles: assigned by verbs

b. Ergative Language
agent roles: assigned by verbs
theme/patient roles: assigned by predicates

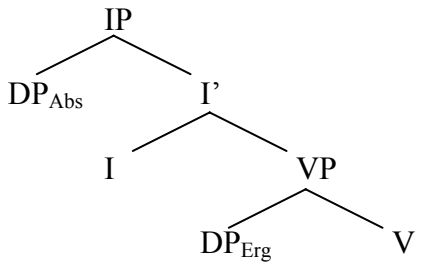
This analysis was developed primarily for Dyirbal, in which the ergative DP exhibits very little subject-like behavior. However, Mayan and Eskimo languages are not easily accounted for in this approach. As I showed in section 3, ergative DPs in these languages have subject properties which are not predicted by Marantz's (1984) proposal. For example, (19) would not be able to account for the reflexive binding facts, since the ergative DP should be c-commanded by the absolutive and not vice-versa.

Quiche Mayan (Larsen & Norman 1979:349)

(20)a.	x-0-u-kamsa-j	*r-iib'*	**lee**	**achih**
	Compl.3s.Abs-3s.Erg-kill-Suff	3s-self	the	man

"The man killed himself."

b.



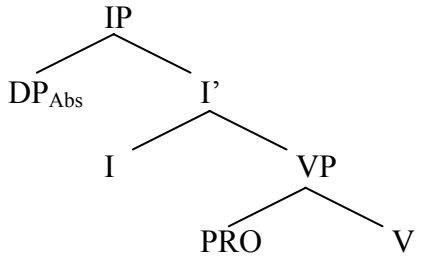
Another fact that cannot be accounted for by Marantz's analysis is the position of PRO, which can appear in the ergative slot in a language like West Greenlandic. Under Marantz's analysis, PRO would have to appear inside VP, while the subject position would be able to host an overt absolutive DP.

W. Greenlandic (Manning 1996:124)

(21)a.	Miiqqat	[PRO	Juuna	ikiu-ssa-llu-gu]	niriursui-pp-u-t.
	children.Abs	[(Erg)	Juuna.Abs	help-Fut-Inf-3s]	promise-Ind-Intr-3p

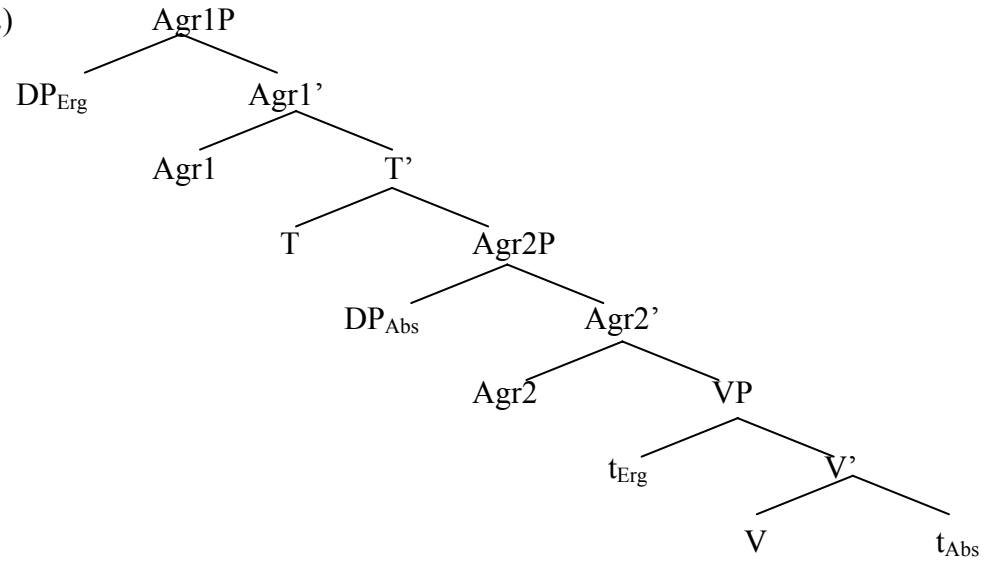
"The children promised to help Juuna."

b.



Levin & Massam (1985), Bobaljik (1993), and Laka (1993) take the opposite approach and propose analyses which treat the absolutive as an object rather than subject. In transitive clauses, ergative case is essentially equated with nominative and absolutive with accusative. Bobaljik (1993) proposes the following structure and Case-checking mechanism. The external argument checks ergative case in [Spec, Agr1P], while the internal argument checks its case in the lower [Spec, Agr2P].

(22)



This proposal accounts for the subject properties of the ergative nominal seen above, as Bobaljik (1993) argues, citing data from Inuit on ergative reflexive binding and controlled PRO. However, there are other ergative languages in which controlled PRO can never appear in the ergative position. In Jacaltec and Mam Mayan, for example, nonfinite clauses must always be intransitive or antipassive.

Jacaltec (Craig 1977:320)

(23)a.	choche	naj	[PRO	caNalw-oj]	
	like	he	(Abs)	dance-Irr	
	"He likes to dance."				
b.	*ch-in	to	[PRO	col-o'	**hach**]
	Asp-1s.Abs	go	(Erg)	help-Fut	2s.Abs
	"I go to help you."				

Seediq also exhibits this characteristic. An embedded nonfinite clause can only be intransitive; absolutive case is not available for checking with an overt absolutive DP.

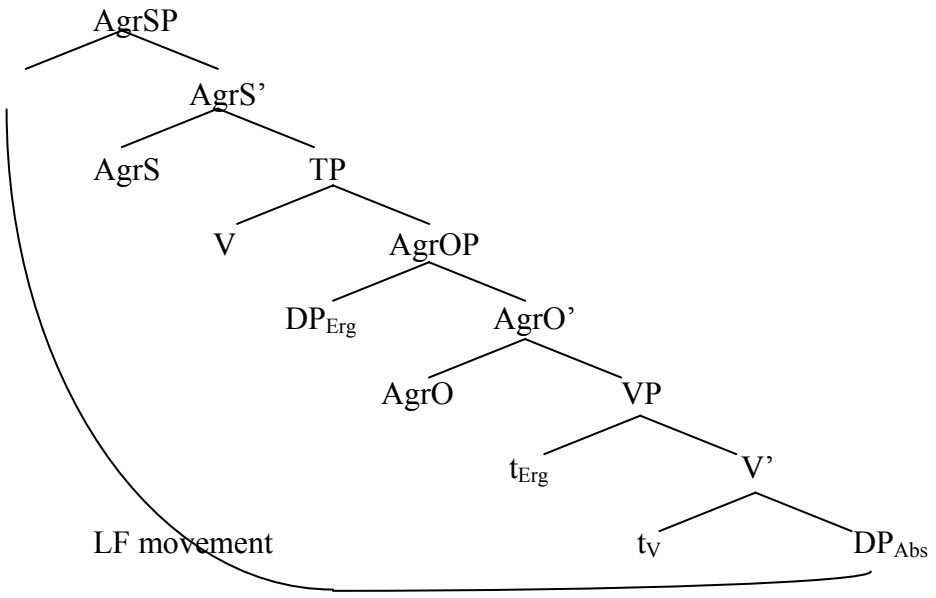
Seediq

(24)a. M-n-osa [PRO m-ari patis taihoku] ka Ape.
Intr-Perf-go Intr-buy book Taipei Abs Ape
"Ape went to buy books in Taipei."

b. *M-n-osa [PRO burig-**un** taihoku (ka) patis]
Intr-Perf-go buy-Tr Taipei Abs book
ka Ape.
Abs Ape
"Ape went to buy books in Taipei."

The third approach to syntactic ergativity chooses a middle path. Contra Marantz and Levin, internal and external arguments are merged into the structure according to the same thematic hierarchy as in accusative languages. However, absolutive case is always associated with the case of the subject, i.e. nominative in an accusative language (Murasugi 1992; Campana 1992; Bittner 1994; Bittner & Hale 1996a, b; Manning 1996; Ura 2000). For instance, Murasugi (1992) proposes an early Minimalist approach in which ergative DPs move to [Spec, AgrOP], like direct objects, to check case, while absolutives check their case in [Spec, AgrSP], like subjects. Surface word order is determined on the basis of whether these movements are overt or covert. For verb-initial languages like Mam or Jacaltec Mayan, the verb raises to T and the ergative DP moves overtly to [Spec, AgrOP]. The absolutive nominal, however, will move covertly to [Spec, AgrSP] covertly at LF, yielding VSO (verb-ergative-absolutive) surface order.

(25)



Subject properties of the ergative nominal like reflexive binding are accounted for in this analysis, since the ergative DP c-commands the absolutive prior to Spell-Out.

W. Greenlandic (Manning 1996:126)

(26) **Junna-p** Kaali *immi-nik* uqaluttuup-p-a-a.
Junna-Erg Kaali.Abs self-Mod tell-Ind-Tr-3s
"Junna$_i$ told Kaali about himself$_i$."

Quiche Mayan (Larsen & Norman 1979:349)

(27) x-0-u-kamsa-j *r-iib'* **lee** **achih**
Compl.3s.Abs-3s.Erg-kill-Suff 3s-self the man
"The man killed himself."

This approach also accounts for the position of PRO in Seediq and Jacaltec. PRO is correctly predicted to occur only in absolutive position, because nonfinite T is not able to check case. There is a problem, however, when it comes to languages in which controlled PRO can occur in ergative position, as in West Greenlandic. More crucially, analyses like Murasugi (1992) are unable to account for the fact that absolutive case is still available for checking with an overt DP.

W. Greenlandic (Manning 1996:124)

(28) Miiqqat [PRO **Juuna** ikiu-ssa-llu-gu] niriursui-pp-u-t.
children.Abs [(Erg) Juuna.Abs help-Fut-Inf-3s] promise-Ind-Intr-3p
"The children promised to help Juuna."

In this section, we have seen that syntactic ergativity cannot be fully accounted for by treating the absolutive entirely as a subject or as a direct object. I have also shown that the approach based on dividing subject properties between ergative and absolutive DPs fails to account for all ergative languages. In the next section, I propose that there are two types of syntactically ergative language. Absolutive case is treated parallel to nominative in one type but receives a different account in the other type.

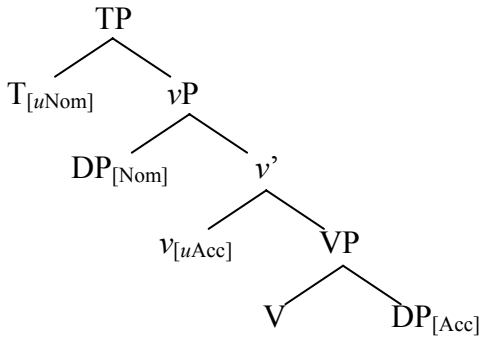
5. Typology of Ergativity

In the previous sections, we have seen that there is a division of labor between ergative and absolutive DPs in terms of subject behavior. We have also seen that ergative languages differ with respect to how these subject properties are distributed between the ergative and absolutive nominals. In Eskimo languages, the ergative DP can bind reflexives and serve as the addressee of an imperative. PRO can also appear in this position. In contrast, in Mam and Jacaltec Mayan, though the ergative DP displays some subject behavior, PRO can only appear in absolutive position. As I will show in section 5.3, Dyirbal absolutives are even more subject-like than those in Mayan languages. Ergative DPs can serve as imperative addressees but cannot bind reflexives. PRO also must appear in the absolutive slot, and VP-coordination operates on an absolutive pivot.

In this section, I present an analysis of these facts based on how absolutive case is licensed and whether the absolutive undergoes A-movement to the [Spec, TP] subject position. The theoretical framework which I assume is the Multiple Spell-Out version of the Minimalist Program, as proposed in Chomsky (2000, 2001a, 2001b). Internal arguments are merged in VP and the external argument in the specifier of *v*P. In an

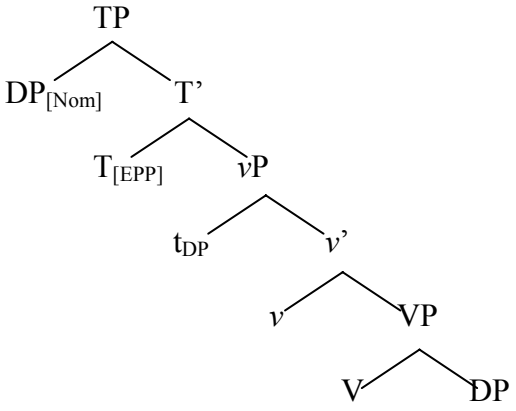
active transitive clause in an accusative language, the external argument checks case with T and the internal argument with *v*. This is accomplished under an Agree relation between the case-assigning functional head and the DP needing to value its case feature. Uninterpretable case features on the functional head act as a probe which seeks a goal DP with matching features in its c-command domain. DPs are merged with unvalued case features. When Agree is established, the case feature of DP is valued.

(29)



In accusative languages, nominative case is checked by T, accusative by *v*. In a great many accusative languages, an EPP feature on T also requires the subject to move to the specifier of this functional projection prior to Spell-Out.

(30)



It is clear from (29) and (30) that the DP residing in [Spec, TP] has special syntactic status. Since it checks both the case and EPP features of T, this DP resides in the highest A-position in the clause, and it checks morphological features (minimally case features) with T. Subjects do not, however, always perform both of these operations. For example, In Icelandic experiencer constructions, where the object appears in nominative case and controls agreement with the verb, it is still the dative-marked external argument which functions as the subject with respect to such operations as raising, reflexive binding, and the position of PRO (Zaenen, Maling, and Thrainsson 1985). (31) shows that the dative subject binds a nominative object reflexive.

Icelandic (Zaenen et al. 1985:450)

(31) Henni þykir bro@Dir sinn leiDinlegur.
her.Datthinks brother.Nom her[+Refl] boring
"She thinks her brother is boring."

What I show in this section is that some subject properties result from either entering into an Agree relation with T, specifically in order to check case or agreement features, or by residing in the highest A-position in the clause, by virtue of having been merged in external argument position or by raising to [Spec, TP] to check T's EPP feature. In the discussion below, I will show how the distribution of subject properties between ergative and absolutive DPs in syntactically ergative languages are determined by these structural relations.

Determination of Subject Properties

(32) 1. DP residing in the highest A-position in the clause
2. DP which checks morphological features (e.g. case, agreement) with T

In this section, I argue that the distribution of subject properties between ergative and absolutive DPs can be accounted for by parametrizing the appearance of case and EPP features on T. First, I propose that there are two types of syntactically ergative language. I label them "T-type" and "*v*-type" ergative languages. The two differ in terms of the roles played by T and *v* in checking absolutive case. In T-type languages, absolutive case is checked uniformly by T. In *v*-type languages, case is checked by T in intransitive clauses but by *v* in transitive clauses. Eskimo languages, Mayan Ixil, and the Australian languages Dyirbal and Warlpiri belong to the *v*-type. Mayan languages Mam and Jacaltec and the Austronesian language Seediq are T-type. As T-type languages, Mam, Jacaltec, and Seediq absolutives display subject properties associated with case-checking. Specifically, PRO always appears in absolutive position, since absolutive case is not available for checking with an overt DP in nonfinite clauses (nonfinite T being unable to check case). In the *v*-type languages, in contrast, PRO can appear in the position of the ergative DP, and absolutive case is still available to check with an overt DP in transitive nonfinite clauses. However, if T does not have an EPP feature, then the absolutive remains inside VP in a transitive clause, leaving the ergative DP, which is merged in [Spec, *v*P] in the highest A-position and affording it subject properties like reflexive binding. (33) summarizes the two types of ergative language.

(33) Two types of ergative language

T-Type:	T always checks absolutive case.
v-Type[2]:	*v* checks absolutive case in transitive clauses.
	T checks absolutive case in intransitive clauses.

[2] The analysis of *v*-type ergativity is the culmination of several years' work by this author. Legate (2003) has independently proposed a similar analysis of ergativity in Warlpiri. In section 5.3, I show how the *v*-type analysis can be extended to account for NP split-ergativity in this language.

I propose an additional parameter for Dyirbal: T has an EPP feature. This accounts for the greater number of subject properties of absolutive DPs in this language. T's EPP feature draws the absolutive DP to its specifier, placing this DP in the highest A-position in the clause. This accounts for the fact that ergative DPs cannot bind absolutive reflexives, since the absolutive c-commands the ergative DP. This also accounts for the fact that coordination operates on a absolutive pivot, the type of coordination in question being analyzed as *v*P coordination, which excludes the [Spec, TP] absolutive position.

5.1. *v*-Type Ergativity

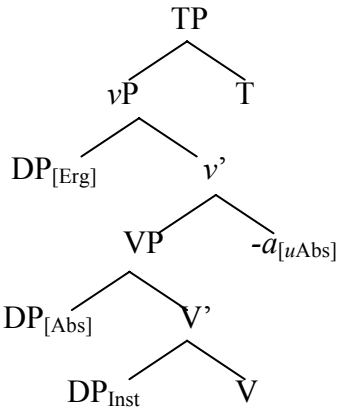
In *v*-type languages, absolutive case is checked by different functional heads (contra Bobaljik 1993, Murasugi 1992, and others), depending on the transitivity of the clause. In transitive clauses, *v* checks absolutive case with an internal argument DP. In intransitive clauses, absolutives check case with T. There are several consequences of this proposal. First, the analysis presupposes that absolutives should not always be equated with subjects. Intransitive absolutives behave like subjects, while absolutives in transitive clauses behave more like direct objects. This leads to the second consequence, which is that absolutive case-checking – unlike nominative – is not necessarily contingent on the finiteness of the clause. In other words, PRO in nonfinite clauses can appear in either ergative or absolutive external argument position, and in transitive clauses absolutive case will still be available for checking with an internal argument. Eskimo languages and Ixil Mayan belong to this type of language.

To illustrate the analysis, I use examples from West Greenlandic. Transitive verbs carry the suffix *-a*, while intransitive verbs are marked with *-u*. In a transitive clause, the transitive suffix *-a* is merged in *v*. This morpheme carries an absolutive case feature, which it checks with the closest DP in VP. Ergative case is inherent, assigned to the external argument by *v*.

W. Greenlandic (Bittner 1994:20)

(34)a. Juuna-p miiqqa-t atuakka-mik nassip-p-a-i.
Juuna-Erg child-Pl.Abs book-Inst send-Ind-Tr-3s.3p
"Juuna sent the children a book."

b.

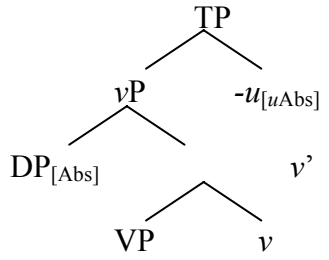


T checks absolutive case in intransitive clauses, with the external argument in an unergative or antipassive clause and with the internal argument in an unaccusative. (35) is an example of an antipassive.

W. Greenlandic (Bittner 1994:23)

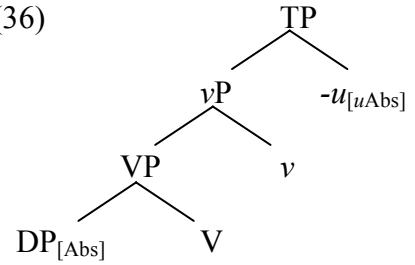
(35)a. Juuna miiqqa-nik paar-si-v-u-q.
Juuna.Abs child-Pl.Inst look.after-AP-Ind-Intr-3s
"Juuna is looking after the children."

b.



(36) shows how case-checking takes place in an unaccusative clause. I assume with Chomsky (2001a) that unaccusative and passive *v*Ps are weak phases, allowing T to probe down into VP without violating the Phase Impenetrability Condition.

(36)



This analysis captures the fact that ergative DPs in these languages behave like subjects. For example, since they are merged in [Spec, *v*P] and can c-command into VP and bind an VP-internal reflexive.

West Greenlandic (Manning 1996:136)

(37) **Junna-p** Kaali *immi-nik* uqaluttuup-p-a-a.
Junna-Erg Kaali.Abs self-Mod tell-Ind-Tr-3s
"Junna$_i$ told Kaali about himself$_i$."

The fact that the ergative argument functions as imperative and hortative addressees is accounted for by the fact that this DP is merged in external argument position.

Yup'ik (Payne 1982:90)

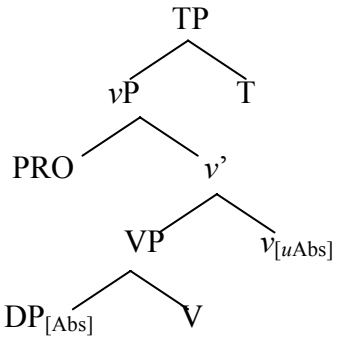
(38) Ner-**ci**-u!
eat-2p-3s
"You all eat it!"

The characteristic discussed in the preceding sections which is found in *v*-type, but not T-type, ergative languages is the possibility of transitive nonfinite clauses. Under the analysis proposed above, this is because absolutive case is checked by *v* in transitive clauses and is therefore still available even when T is nonfinite. In (39), the embedded verb is transitive and there is an overt absolutive DP.

W. Greenlandic (Manning 1996:124)

(39)a. Miiqqat [PRO Juuna ikiu-ssa-llu-gu]
children.Abs (Erg) Juuna.Abs help-Fut-Inf-3s
niriursui-pp-u-t.
promise-Ind-Intr-3p
"The children promised to help Juuna."

b.



Ixil Mayan also displays this characteristic of *v*-type ergativity. Following focused adverbials, verbs appear in their nonfinite dependent form, marked by the suffix -*ata7* (transitive dependent) or *e7* (intransitive dependent). Absolutive case is still available in a transitive dependent clause. (40a) shows a matrix transitive clause with a finite verb. Absolutive agreement is null. The verb shows ergative agreement with the external argument. The nonfinite (dependent) clause in (40b) shows the same agreement pattern, indicating that the nonfinite verb is still transitive and both ergative and absolutive cases are available.

Ixil (Larsen & Norman 1979:354-5)

(40)a. i-b'an q'oon kuxhtu7
3s.Erg-do slowly just
"He did it slowly."

b. q'oon kuxh i-b'an-**ata7**
slowly just 3s.Erg-do-Dep
"He did it *slowly*."

Interestingly, intransitive dependent verbs show ergative (and not absolutive) agreement with their arguments.

Ixil (Larsen & Norman 1979:355)

(41) jojli ku-wat-e7
face.down 1p.Erg-sleep-Dep
"We sleep *face down*."

This contrasts clearly with finite matrix clauses. The single argument of an intransitive predicate controls absolutive agreement, as expected.

Ixil (Larsen & Norman 1979:355)

(42) wat'o7 jojli
sleep-1p.Abs face.down
"We slept face down."

The pattern observed above in Ixil nonfinite clauses receives a straightforward account under the analysis of *v*-type ergativity proposed in this paper. The availability of absolutive case in transitive nonfinite clauses is due to the ability of *v* to check case in transitive clauses. The lack of absolutive case in intransitive nonfinite clauses is accounted for because it is T which checks absolutive case in intransitive clauses, but T lacks a case feature when it is nonfinite. Therefore, only inherent ergative agreement is available[3].

To summarize the main proposal for case-checking in *v*-type ergative languages, in transitive clauses, absolutive case is checked by *v* with an internal argument. In intransitive clauses, absolutive case is checked by T. To compare this with case-checking in an accusative language, where subjects check case with T and objects with *v*, in *v*-type ergative languages, transitive absolutives are treated like direct objects and ergatives like subjects, while intransitive subjects are predicted to behave more like subjects. This clustering of subject properties in the external argument accounts for the subject properties observed in section 3 for ergative DPs.

5.2. T-type Ergativity

In contrast to *v*-type languages, in T-type ergative languages, absolutive case is always checked by T. The main consequence of this is that more subject properties are attributed to absolutive DPs. Principally, controlled PRO can only appear in absolutive position, which means that nonfinite clauses are all intransitive. Seediq and the Mayan languages Mam and Jacaltec belong to this type of ergative language.

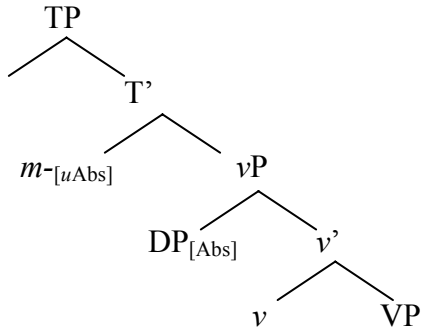
Case-checking in unaccusative and unergative clauses is the same as in *v*-type languages. Intransitive morphology carries an absolutive case feature and is merged in T. This case feature is checked with the external argument in unergative and antipassive clauses.

[3] The pattern observed in (40b) and (41) has been analyzed as a type of split-ergativity (Lengyel 1978, Larsen & Norman 1979, and others): agreement follows an ergative pattern in finite clauses but follows an accusative pattern in nonfinite clauses, because subjects are uniformly marked with ergative case. However, under the analysis of *v*-type ergativity there is no need to posit a special case-marking system for nonfinite contexts.

Seediq

(43)a. Wada **m**-ari patis ka Awe.
Past Intr-buy book Abs Awe
"Awe bought a book."

b.

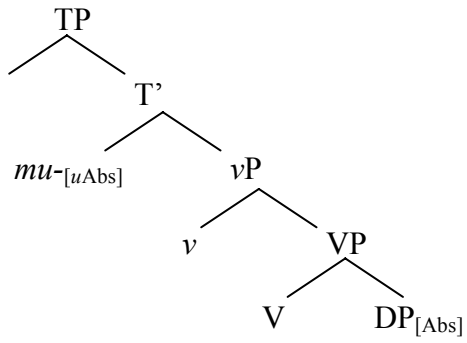


T checks case with an internal argument in unaccusatives. As noted in section 5.1, unaccusative *v*P is a weak phase, so T can undergo an Agree relation with the VP-internal DP without violating the Phase Impenetrability Condition.

Seediq

(44)a. **Mu**-chieka ka sapah.
Intr-cracked Abs house
"The house is cracked."

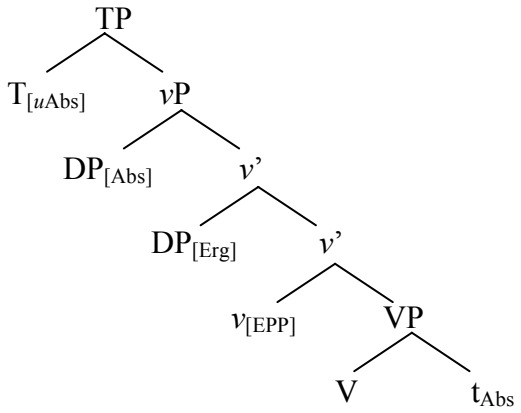
b.



T also checks absolutive case in transitive clauses in T-type ergative languages. Since the ergative DP is merged in a position closer to T than the absolutive DP, the latter must move to the *v*P phase edge in order to serve as the goal for the probe on T. I propose that this is accomplished by merging an EPP feature on transitive *v*. This may appear at first blush to be a stipulation. However, I will show in section 6 that this EPP feature on transitive (and only transitive) *v* is independently motivated. Specifically, this feature plays a key role in ensuing the absolutive restriction on extraction. This EPP feature is also related to determining alternations in information structure between transitive and intransitive clauses[4].

(45)a. Wada bube-**un** na Pihu ka dangi=na.
Past hit-Tr Erg Pihu Abs friend=3s.Gen
"Pihu hit his friend."

b.



The main empirical difference between *v*-type and T-type ergative languages is that the latter do not allow transitive nonfinite clauses. Since absolutive Case is always checked by T, it is not available for checking in a nonfinite clause. Hence, PRO will always appear in the absolutive position and overt absolutive DPs will not appear in the clause.

Jacaltec (Craig 1977:320)

(46)a. choche naj [PRO caNalw-oj]
like he (Abs) dance-Irr
"He likes to dance."

b. *ch-in to [PRO col-o' **hach**]
Asp-1s.Abs go (Erg) help-Fut 2s.Abs
"I go to help you."

[4] As can be seen in (45a), the absolutive DP follows the ergative DP in surface word order in Seediq. Seediq is a VOS language, the absolutive always appearing in clause-final position. In previous work, I have proposed that this word order is derived by moving the absolutive to a topic position above TP and then fronting the remnant TP to the left of the absolutive. Movement of the absolutive to the outer specifier of *v* shown in (45b) is the first step in the process of locating this DP in the topic position.

This is also the case in Seediq. The examples in (47) are antipassives, PRO appearing in the external argument absolutive position.

Seediq

(47)a. M-n-osa [PRO m-ari patis taihoku] ka Ape.
Intr-Perf-go Intr-buy book Taipei Abs Ape
"Ape goes to buy books in Taipei."

b. M-osa=nami [PRO ts-um-uaq qushia]
Intr-go=1p.Abs -Intr-pour water
"We went to water (the plums)."

The matrix clause may be transitive.

Seediq

(48)a. Ha-**an** [PRO ts-um-uaq qushia] ka ritsah kiya.
go-Tr -Intr-pour water Abs plum that
"(We) went to water the plums."

b. Uxe=ku beyo yah-**an** [PRO m-angan]
not=1s.Abs long come-Tr Intr-take
tumuninun=mu da.
weaver=1s.Gen Emph
"Before long, my weaver will come to take me." ("I will die soon.")

However, the embedded clause cannot be transitivized, since absolutive case is not available for checking in a nonfinite clause.

Seediq

(49)a. *M-n-osa [PRO burig-**un** taihoku (ka) patis]
Intr-Perf-go buy-Tr Taipei Abs book
ka Ape.
Abs Ape
"Ape goes to buy books in Taipei."

b. *Yah-an [PRO ngal-**un**=ku] tumuninun=mu da.
come-Tr take-Tr=1s.Abs weaver=1s.Gen Emph
"Before long, my weaver will come to take me." ("I will die soon.")

Interestingly, ergative DPs do not seem to be able to bind absolutive reflexives in T-type languages. Verbs in reflexive constructions in Mam must be antipassive, i.e. intransitive, so that the reflexive argument does not have absolutive status.

Mam (England 1983:187)

(50) ma kub' t-b'iyoo-**n** t-iib' xiinaq
Rec Dir 3s.Erg-kill-AP 3s-RN.Refl man
"The man killed himself."

This is also the case in Seediq. In (51a), the antecedent is the absolutive external argument in an antipassive. The reflexive is a clitic pronoun. In the ungrammatical (51b), the binder is the ergative DP and the reflexive is the absolutive. It is clear that (51b) is a transitive clause, since the verb carries the applicative *s-* which licenses a benefactive argument (the reflexive in this example) as the absolutive.

Seediq

(51)a. Wada=*nak* m-ari rulu **ka** **Ape**.
Past=Refl Intr-buy car Abs Ape
"Ape bought herself a car."

b. *Wada=*nak* s-bari rulu **na** **Ape**.
Past=Refl.Abs App-buy car Erg Ape

This is expected, given that transitive *v* has an EPP feature, drawing the absolutive DP into its outer specifier, from which position it c-commands the ergative DP. Therefore, it is predicted that ergative DPs are not able to bind absolutive reflexives in T-type languages.

Additional support for the analysis of T-type ergativity proposed above is found in aspectless temporally subordinate clauses in Mam. Verbs in such clauses appear in dependent form, just as in Ixil following adverbs, as discussed in section 5.1. Unlike in Ixil, however, absolutive marking in Mam never appears in dependent clauses. In (52), the intransitive subject registers ergative agreement on the embedded verb.

Mam (England 1983:266)

(52) n-chi ooq' [**t**-poon ky-txuu7]
Prog-3p.Abs cry 3s.Erg-arrive 3p-mother
"They were crying when their mother arrived."

Larsen and Norman (1980) have suggested that this is a case of split-ergativity[5], accusative case-marking being employed in nonfinite contexts. However, England (1983) shows that this is not the case, since transitive objects also register ergative agreement.

Mam (England 1983:260)

(53) ok qo tzaalaj-al [ok **t**-q-**il**
Pot 1p.Abs be.happy-Pot when 3s.Erg-1p.Erg-see
u7j t-e yoo1 t-e I7tzal
book 2s-RN/pos word 3s-RN/pos Ixtahuacan
"We will be happy when we see the Ixtahuacan dictionary."

The absence of absolutive marking in the dependent clauses is accounted for straightforwardly under the analysis of T-type ergativity. As England points out, these

[5] This would have to be a different type of split-ergativity from the kind they posit for Ixil (see note 3). Again, given the analysis proposed in this paper, there is no need to view the pattern in Ixil or in Mam as a type of split, since both patterns are captured straightforwardly in the analysis presented here.

clauses are aspectless and temporally subordinate. It is therefore reasonable to assume that T is defective and has no absolutive case feature to value. Therefore, only inherent ergative marking is available.

In section 5.1, I proposed that Ixil, another Mamean language, is a *v*-type language. This may raise a doubt as to how closely related languages can display different types of ergative syntax. In fact, England (1983) suggests that historically the Mamean subgroup as a whole evidenced the type of ergativity seen in Ixil and that the system in Mam was historically derived from it by replacing absolutive marking with ergative marking in nonfinite contexts. This process can be translated into the generative system I have proposed by stating the historical change as the loss of the absolutive case feature on *v* in a *v*-type language like Ixil, resulting in a T-type language like Mam.

This subsection has presented the analysis of case-checking in T-type ergative languages. The primary distinction between *v*-type and T-type languages is that T has the sole ability to check absolutive case in the latter. Empirically, this analysis accounts for the greater number of subject properties of absolutives in T-type languages, in particular the fact that controlled PRO must occupy the absolutive slot in these but not in *v*-type languages.

5.3. EPP Feature on T

In the previous two subsections, I have discussed the differences between T-type and *v*-type languages in terms of case-checking. So far, I have not mentioned whether T has an EPP feature triggering movement of a DP to its specifier. In this section, I propose that Dyirbal is a *v*-type language but that T has an EPP feature which draws the absolutive DP to its specifier and thus results in the subject-like behavior of absolutives in this language.

Initial evidence for this proposal comes from word order facts in this language. Dixon (1972, 1994) notes that although Dyirbal word order is relatively free, the absolutive DP tends to precede the ergative in unmarked order.

Dyirbal (1972:59)

(54) bayi yara baNgun dugumbi-ru balgan
man woman-Erg hit
"woman is hitting man"

Furthermore, ergative DPs in Dyirbal are not able to bind absolutive reflexives. Reflexive verbal forms are derived from transitive verb roots through suffixation. The resulting verb is intransitive, and the single argument has absolutive status. (55a) shows a transitive clause with both an ergative and absolutive DP. (55b) is a reflexive example. The reflexive suffix appears on the verb. The single argument is an absolutive.

Dyirbal (Dixon 1972:89)

(55)a. bala yugu baNgul yara-Ngu buyban
stick.Abs man-Erg hide
"man hides stick"

b. bayi yara buyba-**yiriøu**
man.Abs hide-Refl
"man hides himself"

The above two facts could be accounted for by analyzing Dyirbal as a T-type language in which transitive *v* carries an EPP feature, which moves the absolutive DP from inside VP to the outer specifier of *v*, where this DP then precedes and c-commands the ergative DP. However, coordination facts suggest a different analysis. *v*P's are conjoined in English to the exclusion of the subject, which resides in [Spec, TP].

(56) [$_{TP}$ Mother [$_{vP}$ saw father] and [$_{vP}$ returned]].

*v*P coordination in Dyirbal excludes the absolutive. This clearly suggests that the absolutive DP resides in a projection outside of *v*P.

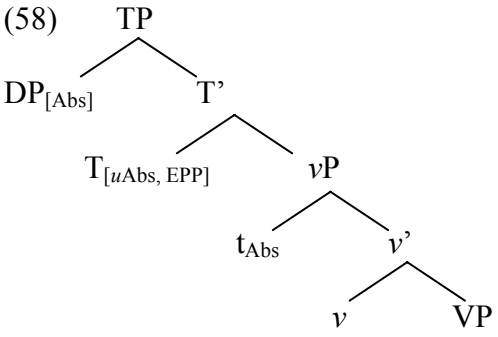
Dyirbal (Dixon 1994:155)

(57)	[$_{TP}$	nguma	[$_{vP}$	yabu-nggu	buran]	[$_{vP}$	banagan^{y}u]]
		father.Abs		mother-Erg	saw		returned

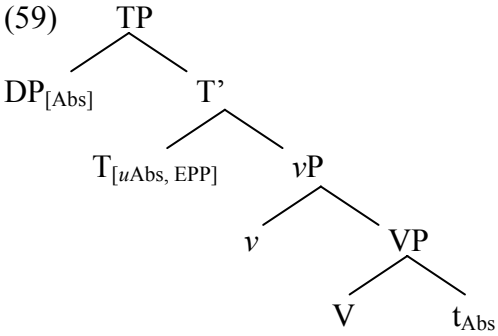
"Mother saw father and returned."

We can account for the word order, binding, and coordination facts in Dyirbal by proposing that T has an EPP feature in this language. Consequently, the absolutive DP moves to [Spec, TP], where it functions basically as the subject of the clause. In intransitive clauses, the absolutive DP is attracted to[Spec, TP] directly. (58) shows this movement in an unergative or antipassive clause. (59) shows an unaccusative clause.

(58)

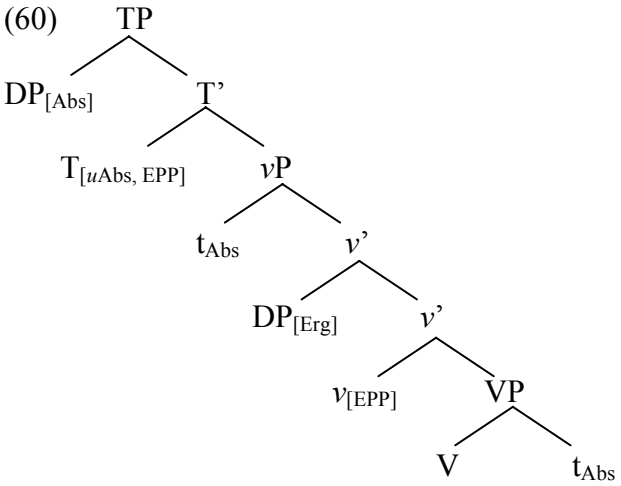


(59)



In a transitive clause, the absolutive first moves to the outer specifier of *v*, attracted by the EPP feature on transitive *v*, which was introduced in section 5.2[6]. From this position, it is further attracted to [Spec, TP]. Under the assumption that the feature on T attracts or undergoes Agree with the closest goal, only the absolutive DP, in *v*'s outer specifier is eligible to move; the ergative DP, located in the inner specifier, will not be attracted. I will discuss the exact nature of this locality condition in section 6.

(60)



In this section, I will propose that Dyirbal is *v*-type language. However, it should be noted that the facts discussed so far are compatible with either a T-type or *v*-type analysis. This is because the absolutive DP can check case in its base position with *v* or with T after raising to the *v*P phase edge. The primary diagnostic I have used to distinguish *v*-type from T-type languages in sections 5.1 and 5.2 is whether controlled gaps in nonfinite clauses can occur in ergative position or are limited to absolutive position. Dyirbal appears to pattern with T-type languages: the gap must appear in the absolutive slot.

Dyirbal (Dixon 1994:168)

(61)a. nguma banaga-n^{y}u [___ yabu-nggu bura-li]
father.Abs return-Nonfut (Abs) mother-Erg see-Purp
"Father returned in order for mother to see him."

b. nguma banaga-n^{y}u [___ bural-nga-ygu yabu-gu]
father.Abs return-Nonfut (Abs) see-AP-Purp mother-Dat
"Father returned in order to see mother."

Under a T-type analysis, this fact would be accounted for by the lack of absolutive case for an overt DP in a nonfinite clause. However, there is additional evidence that absolutive case is in fact available in nonfinite clauses in Dyirbal. An overt absolutive can appear inside the purpose clause, as shown in (62). This suggests that

[6] In section 6, I will provide evidence from the absolutive restriction on A'-extraction which shows that that transitive *v* has an EPP feature in *v*-type languages as well in T-type languages.

examples like those in (61) are not cases of control involving PRO; rather the gap is pro, as suggested by Manning (1996).

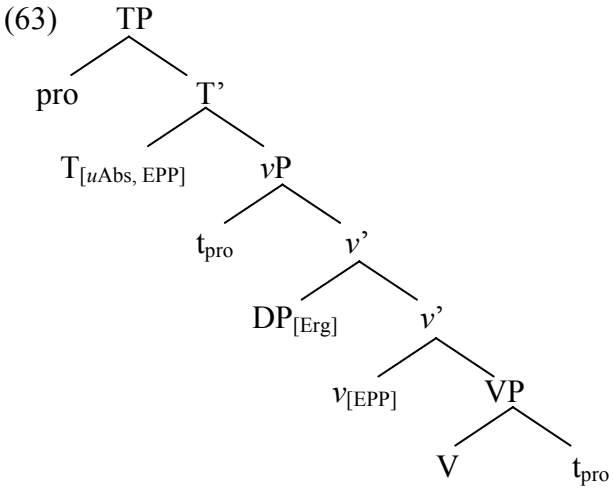
Dyirbal (Manning 1996:65)

(62)	anyja	banggul	burrubay	julma-n
	Part	Dem.Erg	boil.Abs	squeeze-Nonfut
		[**bayi**	**nyalngga**	mayi-yarra-ygu]
		Dem.Abs	child.Abs	come.out-begin-Purp

"He squeezed the boil, with the result that a male child came out."

Since absolutive case must be available in nonfinte clauses, as shown by the presence of an overt absolutive in (62), Dyirbal should be analyzed as a *v*-type and not a T-type language. Regarding the fact that the gap must appear in absolutive position in (61), this is accounted for in my analysis by the EPP feature on T. T's EPP feature ensures that the absolutive is the highest DP in the clause and therefore closest to the controller in the matrix clause.

(63)



Further evidence in favor of a *v*-type analysis of Dyirbal comes from NP split-ergativity. Dyirbal displays a type of split-ergativity in which first and second person pronouns are marked according to a nominative-accusative pattern, in contrast to full NPs, which follow an ergative-absolutive pattern. Intransitive single arguments and transitive external arguments receive nominative case, which is zero-marking like absolutive case. In contrast to these, transitive direct objects take the accusative case marker *-na*.

Dyirbal (Dixon 1994:161)

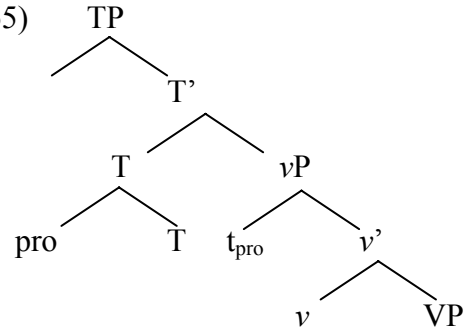
(64)a.	ngana	banaga-n^{y}u
	we.all.Nom	return-Nonfut
	"We returned."	
b.	n^{y}urra	banaga-n^{y}u
	you.all.Nom	return-Nonfut
	"You all returned."	

c. n^{y}urra ngana-**na** bura-n
you.all.Nom we.all-Acc see-Nonfut
"You all saw us."

d. ngana n^{y}urra-**na** bura-n
we.all.Nom you.all-Acc see-Nonfut
"We saw you all."

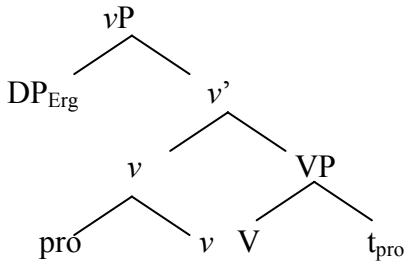
v-type ergativity provides a natural account of this phenomenon, since T and *v* are both case-assigning functional heads in this type of language. In Dyirbal, the pronouns in question can be analyzed as cliticizing to their case-assigning functional heads, while case morphemes are inserted post-syntactically according to the local environment of the pronoun. Concretely, external arguments and intransitive subjects will attach to T.

(65)



Direct objects in transitive clauses will attach to *v*.

(66)



Note that the cliticization analysis accounts for the word order observed in (64). Full NP arguments tend to assume absolutive-ergative order, while pronouns appear as nominative-accusative. As for the case-markers, assuming a Distributed Morphology approach to case-assignment, case morphemes are inserted at morphological structure (Marantz 1991, McFadden 2004), depending on the structural configuration of the DPs to which they attach. Zero nominative-marking is assigned to pronouns attached to T, and accusative *-na* is assigned to pronouns attached to *v*.

Vocabulary entries

(67)a. case ⇔ NULL /[$_{D}$ pro__]T

b. case ⇔ *-na* /[$_{D}$ pro__]*v*

In this way, split-ergativity in Dyirbal can be viewed not as an aberration in an otherwise ergative language. Rather, the pattern displayed by first and second person pronouns can be viewed as a direct mapping from argument structure to case-marking, as in an active clause in an accusative language.

The cliticization analysis also comports well with Dixon's (1994) proposal that split-ergativity in Dyirbal is part of a broader tendency in ergative languages for pronominal or bound forms to assume a nominative/accusative pattern, while full NPs adhere to the ergative/absolutive pattern.

(68) Nominal Hierarchy (Dixon 1994:85)

1st/2nd Person Pronoun	Dem/3rd Person Pronoun	Proper N	Common N
Nom/Acc marking	←==========	==========	→ *Erg/Abs marking*

Warlpiri provides another example. In this language, marking on full NPs is ergative-absolutive. But these arguments register agreement on the verb in a nominative-accusative pattern.

Warlpiri (Bittner & Hale 1996b)

(69)a. jalangu **rna** ya-nu-rnu *ngaju*
today 1s.Subj go-Past-hither 1s.Abs
"I came today."

b. *ngajulu-rlu* ka-**rna-ngku** *nyuntu* nya-nyi
1s-Erg Pres-1s.Subj-2s.Obj 2s.Abs see-Nonpast
"I see you."

c. watiya **ju** yaarlpa-wanti-ja ngaju-ku
tree 1s.Obj onto-fall-Past me-Dat
"The tree fell on top of me."

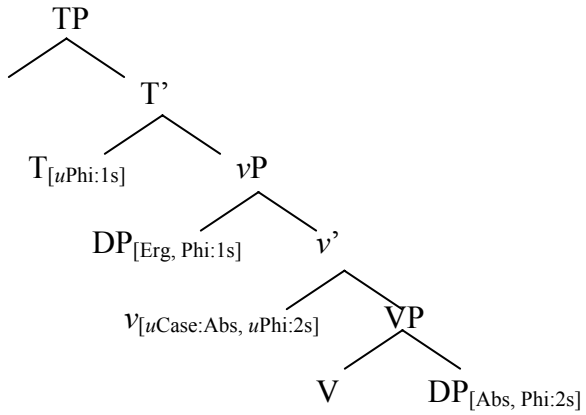
d. *nyuntu* ka-**npa** parnka-mi
2s.Abs Pres-2s.Subj run-Nonpast
"You are running."

Again, a *v*-type analysis of Warlpiri syntax[7] lends itself very naturally to an account of the NP split-ergativity seen (69) above. Case-checking on full NPs takes place in the usual way in *v*-type languages. In a transitive clause, *v* checks absolutive case with the direct object; ergative case is inherent. Agreement is realized via *phi*-feature copying to the nearest c-commanding case-assigning functional head, either T or *v*.

(70)a. *ngajulu-rlu* ka-**rna-ngku** *nyuntu* nya-nyi
1s-Erg Pres-1s.Subj-2s.Obj 2s.Abs see-Nonpast
"I see you."

[7] As I mentioned in note 2, Legate (2003) proposes an account of Warlpiri very similar to *v*-type ergativity proposed in this paper.

b.



As for the realization of the agreement morphemes, those realized on T follow the nominative paradigm, while those on *v* follow the accusative. A sample is shown in (71) for first and second person.

Agreement

(71)a. 1s ⇔ *rna* /[$_T$ __]
b. 2s ⇔ *npa* /[$_T$ __]
c. 1s ⇔ *ju* /[$_v$ __]
d. 2s ⇔ *ngku* /[$_v$ __]

To summarize, T in Dyirbal has an EPP feature, which draws the absolutive to its specifier, thus accounting for the greater subject-like behavior of absolutives in this language than in other syntactically ergative languages. However, although Dyirbal absolutives have move subject properties than ergatives, I have analyzed this language as *v*-type and not T-type. Evidence for this comes primarily from NP-split-ergativity, which suggests that both T and *v* participate in case-checking in this language.

6. Dislocation and Specificity

In this section, I turn to the absolutive restriction on A'-extraction. As discussed in section 2, absolutive DPs but not ergative DPs are eligible to undergo A'-movement in syntactically ergative languages.

W. Greenlandic (Manning 1996:84)

(72)a. nanuq$_i$ [Piita-p e_i tuqu-ta-a]
polar.bear.Abs Piita-Erg kill-Tr.Part-3sg
"a polar bear killed by Piita"

b. *angut$_i$ [e_i aallaat tigu-sima-sa-a]
man.Abs gun.Abs take-Perf-Rel.Tr-3sg
"the man who took the gun"

The analysis I will propose of the A'-extraction restriction also accounts for an interpretive difference between absolutive direct objects and oblique objects in

antipassives. The former tend to be interpreted as definite, sometimes even topicalized, whereas the former typically receive an indefinite, nonspecific reading.

Seediq

(73)a. Wada=na puray-un ka **qutsuruh**.
Past=3s.Erg cook-Tr Abs fish
"She cooked *the* fish."

b. M-n-ari **qutsuruh** chiiga (ka) Ape.
Intr-Perf-buy fish.Obl yesterday Abs Ape
"Ape bought *a* fish yesterday."

The analysis takes as its theoretical foundation the theory of Multiple Spell-Out as proposed by Chomsky (2000, 2001a, 2001b). The status of *v*P as a phase and the Phase Impenatrability Condition (Chomsky2001b:5) play crucial roles in this account.

(74) Phase Impenatrability Condition (PIC)
The domain of a phase head is not accessible to operations, but only the edge is.

The PIC dictates that movement of VP-internal material must first pass through the edge of *v*P, i.e. the outer specifier. In the case of object *wh*-movement, for example, *v* must have an EPP feature to first draw this DP into its outer specifier. From this position in the edge of *v*P, the object is accessible to the [wh] feature on C and can undergo further movement to [Spec, CP]. Direct movement from within VP to [Spec, CP] would violate the PIC.

(75) What did you $[_{vP}\ t_{what}\ [_{v'}\ t_{you}\ [_{v[EPP]}\ [_{VP}$ eat $t_{what}\ ]]]]$?

It is assumed for English that EPP features are generated on *v* when needed. What I propose for ergative languages is that the appearance of EPP features on *v* is restricted in the following way.

(76) Transitivity and EPP
- ⇨ Transitive *v* has an EPP feature, drawing the absolutive DP to its outer specifier. From here it can undergo further movement to [Spec, CP]. This DP also gets a presuppositional reading at LF.
- ⇨ Intransitive *v* has no EPP feature; the direct object in an antipassive does not raise out of VP and undergoes Existential Closure at LF.

6.1. Absolutive Restriction on Extraction

In this subsection, I show how the above proposal accounts for the absolutive restriction on A'-extraction. As I have shown in section 2, a relative clause in a syntactically ergative language can be formed on a direct object in a transitive clause, as in (77b). However, the ergative DP is not eligible for extraction.

Seediq

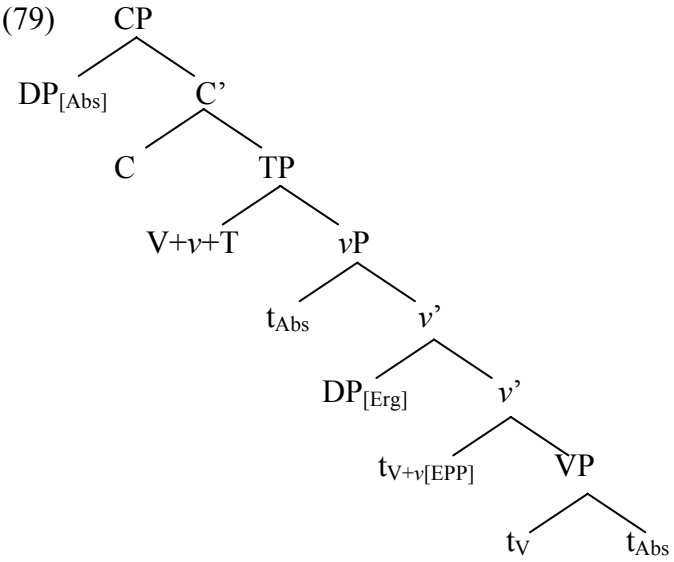
(77)a. B-n-ari na Ape ka patis-ni.
Perf-buy Erg Ape Abs book-Def
"Ape bought the book."
b. patis b-n-ari na Ape
book Perf-buy Erg Ape
"book bought by Ape"
c. *seediq s-n-malu ka sapah
person -Perf-build Abs house
"person who built the house"

A relative clause also cannot be formed on the oblique object in an antipassive.

Seediq
(78)a. M-n-ari patis ka Ape.
Intr-Perf-buy book Abs Ape
"Ape bought a book."
b. *patis m-n-ari ka Ape
book Intr-Perf-buy Abs Ape
"book bought by Ape"

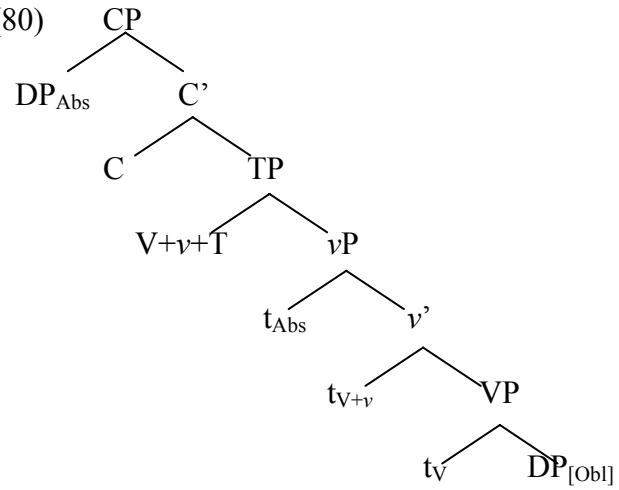
This pattern is accounted for in the present analysis as follows. As proposed above, *v* hosts an EPP feature only when it is transitive. This EPP feature attracts the VP-internal absolutive to the *v*P phase edge, making it the closest DP to C and ensuring that it is the DP which will be able to undergo A'-movement to [Spec, CP].

(79)



In an antipassive – which is intransitive – *v* does not have an EPP feature, so the DP merged in [Spec, *v*P] is now the closest DP to C. A VP-internal DP cannot be attracted without violating the Phase Impenetrability Condition.

(80)



There is abundant evidence that antipassives, though semantically transitive, are syntactically intransitive. In the West Greenlandic examples below, the transitive verb in (81a) agrees with the ergative and absolutive arguments, while the antipassive verb in (81b) shows agreement only for the absolutive external argument. The semantic object is relegated to oblique status, marked with instrumental case.

West Greenlandic (Bittner and Hale 1996a)

(81)a. Juuna-p Anna kunip-p-**a**-**a**.
Juuna-Erg Anna.Abs kiss-Ind-Tr-3s.Erg.3s.Abs
"Juuna kissed Anna."

b. Juuna Anna-mik kunis-si-v-u-**q**.
Juuna.Abs Anna-Inst kiss-AP-Ind-Intr-3s.Abs
"Juuna kissed Anna."

(82) shows the same pattern for Mam. (82a) shows a transitive clause and (82b) the antipassive version of the same sentence.

Mam (England 1983:212)

(82)a. ma **0**-tzaj **t**-tzyu-7n Cheep ch'it
Rec 3s.Abs-Dir 3s.Erg-grab-Ds Jose bird
"Jose grabbed the bird."

b. ma **0**-tzyuu-n Cheep t-i7j ch'it
Rec 3s.Abs-grab-Ap Jose 3s-RN/Pat bird
"Jose grabbed the bird."

In Seediq, ergative and absolutive arguments are registered by clitic pronouns. The transitive clause in (83a) shows both clitics. The antipassive in (83b) has only the external argument absolutive clitic. (83c) shows that the antipassive clause cannot have both clitics.

Seediq

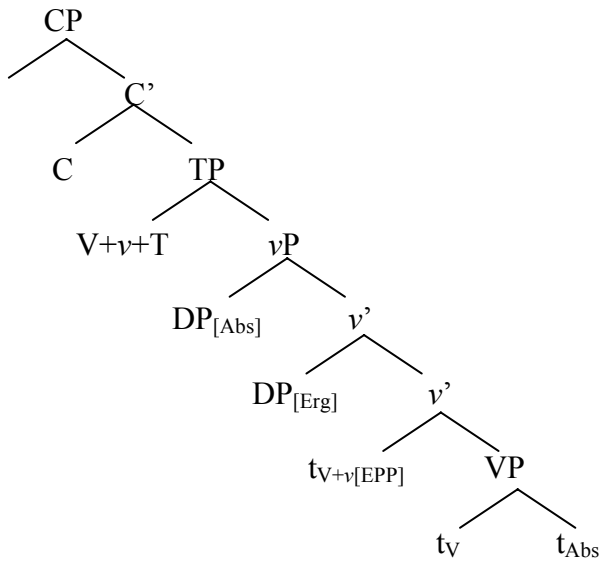
(83)a. Wada-**sa.ku** bube-un.
Past-2s.Erg.1s.Abs hit-Tr
"You hit me."

b. Wada=**su** beebu yaku.
Past=2s.Abs hit.Intr me
"You hit me."

c. *Wada=**sa.ku** beebu.
Past=2s.1s hit.Intr
"You hit me."

The correlation between transitivity and the ability of *v* to host an EPP feature accounts for the asymmetry between absolutives in transitive clauses and oblique objects in antipassives. As shown in (77c) above, ergative DPs are also ineligible for A'-extraction. It is not immediately apparent how this is accounted for by my proposal. In a transitive clause, the ergative and absolutive DPs are both located in the *v*P phase edge and therefore should both be able to undergo Agree with a functional head in the next phase, e.g. C.

(84)



However, as I have shown above, ergative DPs are not eligible for extraction.

Mam (England 1983:250-1)

(85)a. *alkyee saj t-tzyu-7n kab' xiinaq
who Rec.Dep.3sAbs.Dir 3sErg-grab-Ds two man
"Who grabbed the men?"

b. alkyee saj tzyuu-n ky-e kab' xiinaq
who Rec.Dep.3sAbs.Dir grab-AP 3p-Rn two man
"Who grabbed the men?"

This is accounted for by Fox and Pesetsky's (2004) Cyclic Linearization, under which Spell-Out linearizes material in each spell-out domain, which for them are CP, VP[8], and DP. Once established, information about linearization is not deleted in the course of the derivation. Therefore, if in a subsequent Spell-Out domain, the relative order of two elements is reversed, a contradiction arises and the derivation crashes. One advantage of this proposal is that it derives the successive-cyclic nature of long-distance A'-movement.

(86) Successive-cyclic *Wh*-movement
[$_{CP}$ [To whom]$_i$ will he [$_{vP}$ t_i say [$_{CP}$ t_i that Mary$_j$ [$_{vP}$ t_i t_j gave the book t_i]]]]

When Spell-Out applies to *v*P, the order among the elements in this domain is *to whom* > *Mary*[9] > *gave* > *the book*. In the next Spell-Out domain, the order will be *to whom* > *that* > *Mary* > *v*P. The *wh*-phrase continues to precede the subject and all VP-internal material (and will do so until the end of the derivation), so the derivation converges.

If, on the other hand, movement were not successive-cyclic, then the initial order in *v*P would be altered in subsequent Spell-Out domains, yielding an ordering contradiction and causing the derivation to crash.

(87) Non-successive-cyclic *Wh*-movement
[$_{CP}$ [To whom]$_i$ will he [$_{vP}$ t_i say [$_{CP}$ t_i that Mary$_j$ [$_{vP}$ t_j gave the book t_i]]]]

The order achieved in the first *v*P Spell-Out domain is *Mary* > *gave* > *the book* > *to whom*. In the following CP Spell-Out domain, *to whom* now precedes the subject and VP-internal material, yielding a contradiction and causing the derivation to crash.

To return to ergative DP extraction, moving the ergative DP over the absolutive would yield an ordering contraction of the type just seen above. First, examine absolutive extraction from a transitive clause, which is grammatical.

(88) Absolutive Extraction
[$_{CP}$ DP_{Abs} … [$_{vP}$ t_{Abs} DP_{Erg} VP]]

The order obtained in the *v*P Spell-Out domain is DP_{Abs} > DP_{Erg} > VP. In the CP Spell-Out domain, the absolutive continues to precede the ergative DP and other VP-internal material, so the derivation converges. However, if the ergative DP is extracted over the absolutive and moves on to [Spec, CP], then the relative order of the ergative and absolutive DPs will be reversed in the second Spell-Out domain, yielding a contradiction and causing the derivation to crash.

---

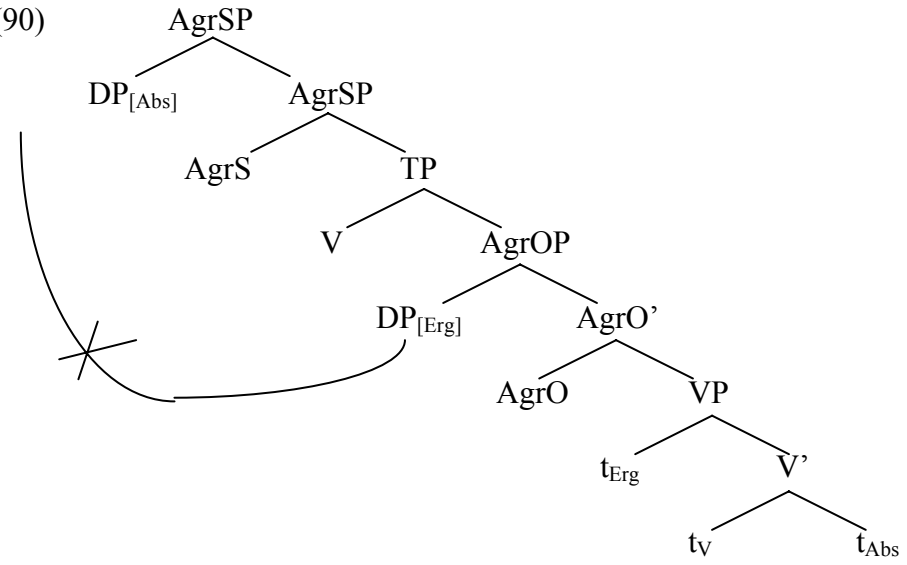
[8] Certain types of cross-linguistic variation is accounted for by parametrizing VP or *v*P as the spell-out domain headed by the verb. The domain is VP for Scandinavian languages. Ko (2004) gives from evidence from scrambling that *v*P is the relevant domain in Korean. I assume that the domain is *v*P in ergative languages.

[9] For Fox and Pesetsky, the relevant domain in English is VP and not *v*P. Since the result is the same for either domain, I use *v*P for illustration in this example in order to make the analysis parallel with ergative languages.

(89) Ergative Extraction
$[_{CP}\ DP_{Erg} \ldots [_{vP}\ DP_{Abs}\ t_{Erg}\ VP]]$

Campana (1992) has also proposed an approach to the absolutive extraction restriction based on locality. Campana assumes an analysis of absolutive and ergative case-checking along the lines of Murasugi (1992) in which the ergative DP checks case with AgrO and the absolutive with AgrS. However, Campana adds the stipulation that, while the ergative DP moves into the specifier of AgrO and therefore resides in an A-position, the absolutive DP adjoins to AgrSP, creating an A'-chain. The absolutive extraction restriction is then accounted for in terms of relativized minimality: A'-movement cannot take place from a position lower in the clause than AgrS, because the absolutive DP would be a closer A'-binder for the trace of this nominal.

(90)



The account I have proposed, however, has the advantage of not needing to stipulate the A/A' status of checking positions. In addition, Campana's account also suffers from the disadvantage of Murasugi's (1992) approach in not being able to account for *v*-type ergative languages, as I have shown in section 4.

The analysis I have presented in this section accounts for why it is absolutives and only absolutives which can undergo A'-movement, which I consider to be the hallmark characteristic of syntactic ergativity. It could be objected that cross-linguistically, it is subjects and not absolutives which display this characteristic. In a survey of about fifty languages, Keenan and Comrie (1977) conclude that languages generally have constraints on which grammatical relations can undergo relativization. Their conclusion is that if direct objects in a given language can relativize, then so can subjects. Likewise, if a language allows relativization of genitives, then it also permits obliques, indirect objects, direct objects, and subjects to relativize. Finally, if only one nominal in a language can relativize, then that nominal is the subject.

(91) Accessibility Hierarchy for Relativization (Keenan & Comrie 1977)
SU > DO > IO > OBL > GEN > OCOMP

Keenan and Comrie do concede the fact that relativization in the ergative language Dyirbal is limited to absolutives. However, they propose to accommodate this potential counterexample by identifying the absolutive as a subject in this language. They additionally make the claim that other ergative languages allow relativization of both absolutives and transitive subjects, i.e. ergative nominals. They claim, for example, that Mayan languages allow relativization of (ergative) subjects in addition to (absolutive) objects.

(92) x-w-'il [naj x-watx'e-**n** hun ti']
3sAbs.Asp-1sErg-see man 3sAbs.Asp-make-**Rel** one this
"I saw the man who made this."

However, their analysis of the example in question is suspect. The verb in the embedded clause carries the suffix **-n**, which Keenan and Comrie gloss claim to be a relativizer. However, this suffix also appears in antipassives (Jacaltec: Craig 1977, Mam: England 1983). Extraction of direct objects requires no special morphology on the verb. But extraction of a transitive subject requires suffixation of *-n(i)*.

Jacaltec (Craig 1977:213)
(93)a. wohtaj ix [xil naj]
I.know cl/her saw cl/he
"I know the woman that he saw."
b. wohtaj naj x'il-**ni** ix
I.know cl/him saw-N(I) her
"I know that man that saw her."

Craig (1977:215-216) notes that *-n(i)* suffixation is correlated with the absence of ergative case marking and that the verb derived by suffixation is intransitive. Subsequent work on Jacaltec, for example Ordonez (1995), has identified this suffix as an antipassivizer. Given this, relativization in the Jacaltec example in (93) can also be seen to apply to an absolutive and not an ergative subject.

For sake of thoroughness, I will also include an example from Mam. (94a) shows a transitive clause. (94b) shows a relative clause formed on this sentence. The ergative DP has been extracted. Note that the verb takes the *-n* antipassive suffix.

Mam (England 1983:292)
(94)a. o tz'-ok t-b'iyo-7n xiinaq Luuch
Past 3s.Abs-Dir 3s.Erg-hit-ds man Pedro
"The man hit Pedro."
b. lo-7n xiinaq w-u7n-a
see-Part man 1s-RN/Ag-1s
[(aj) ok b'iyoo-n t-e Luunch]
(Dem) Past.Dep.3s.Abs.Dir hit-AP 3s-RN/Pat Pedro
"I saw the man who hit Pedro."

Thus, the extraction restriction can be seen to be a characteristic of absolutives, as I have shown in section 2 and analyzed above in the present section. However, there still remains the question of the other languages Keenan and Comrie cite as allowing only subjects to relativize. However, nine of the eleven languages (in addition to Dyirbal) that Keenan and Comrie cite as allowing only one grammatical function to relativize are Austronesian. The question of whether Austronesian languages are ergative, accusative, or belong to their own distinct typological class remains a controversial issue. However, many Austronesian languages have been analyzed convincingly as ergative or having ergative characteristics (Payne 1982, Cooreman 1982, Hopper 1983,` Gertds 1988, De Guzman 1988, Verhaar 1998, Gibson & Starosta 1990, Brainard 1994, Huang 1994, Maclachlan 1996, Maclachlan & Nakamura 1997, Wechsler & Arka 1998, Arka 1998, Otsuka 2002, van de Visser 2003, Liao 2004, among others). In fact, the primary argument used by a number of Austronesian linguists (e.g. Bell 1983, Kroeger 1993, Chang 1997) in favor of an accusative view of a given language has been the relativization restriction. For example, Bell (1983) cites the Accessibility Hierarchy in claiming that the sole relativizable grammatical role in Cebuano must be a subject and therefore that the language is accusative and not ergative. The fact noted above that nearly all of the languages which Keenan and Comrie cite as exhibiting this restriction are Austronesian in effect nullifies this argument, due to its ultimately circular nature, and deprives the accusative side of the debate of any substantive argumentation. I will note in passing that this author does not believe that all Austronesian languages are (syntactically) ergative. However, as argued by Starosta et al. (1982), Kikusawa (2002), and others, Proto-Austronesian was almost certainly an ergative language, and the variation observed among Austronesian languages today can be accounted for in terms of a historical continuum, moving from ergative to accusative syntax, but with even some of the most accusative languages (e.g. standard Indonesian) retaining the extraction restriction.

6.2. Information Structure

This section focuses on the differences in interpretation between absolutive direct objects and antipassive oblique objects. In contrast to definite, generic, or topicalized absolutives, antipassive objects cross-linguistically tend to be indefinite, nonspecific, or less affected by the action of the verb. The South Baffin Eskimo example below shows a contrast for definiteness or specificity. *-si-* in (95a) is a marker of antipassivization or reflexivity; the oblique object is indefinite. (95b) is a transitive clause, in which the object has absolutive status and is definite.

South Baffin Eskimo (Kalmar 1979:124)

(95)a.	Joosi	quqiq-**si**-y-up-0	**tuttu-mik**
	Joosi.Abs	shoot-*si*-Ptcp-Monop-3	caribou-Mod
	"Joosi shot a caribou."		
b.	Joosi-up	quqi-kkaniq-t-a-nga	**tuttu**
	Joosi-Erg	shoot-again-Ptcp-Polyp-3/3	caribou.Abs
	"Joosi shot the same caribou again."		

The same pattern is observed in Seediq. The following pairs illustrate that an indefinite object mentioned for the first time in the discourse appears naturally in an antipassive, as in (96a) and (97a). But the second mention of this NP requires it to be in the absolutive role in a transitive clause. (96b) is an example of a theme in a basic transitive. In (97b), the object in question is an instrument in an applicative construction.

Seediq

(96)a. M-n-ari **qutsuruh** chiiga Ape.
Intr-Perf-buy fish yesterday Ape.Abs
"Ape bought a fish yesterday."

b. Wada=na puray-un ka **qutsuruh**.
Past=3s.Erg cook-Tr Abs fish
"She cooked the fish."

(97)a. M-n-oda m-ari **qushia mutaso** Hori ka Awe-ni.
Intr-Perf-go Intr-buy water clean Puli Abs Awe-Def
"Awe went to buy clean water in Puli."

b. Wada=na s-pahu lukus ka **qushia mutaso**.
Past=3s.Erg App-wash clothes Abs water clean
"She washed clothes with the clean water."

Bittner (1987, 1995) argues that transitive direct objects and antipassive obliques exhibit different scope effects. The transitive object in (98a) must refer to a specific student, taking scope over the modal, while the antipassive oblique in (98b) scopes under the modal.

West Greenlandic (Bittner 1987:20-1)

(98)a. **atuartut** **ilaat** ikiur-tariaqar-pa-ra
of.students one.of.them.Abs help-must-Tr.Indic.1s.Erg/3s.Abs
"I must help one of the students."

b. **atuartut** **ilaan-nik** ikiuisariaqarpunga
ikiur-(ss)i-tariaqar-pu-nga
of.students one.of.them-Inst help-AP-must-Intr.Indic-1s.Abs

Aspect is sometimes involved in antipassive constructions. Typically, there is a sense that the action is less complete. In West Greenlandic, Chukchee, and Chamorro, antipassive constructions can have a hatibual or iterative interpretation, as in the following from West Greenlandic.

West Greenlandic (Cooreman 1994:57)

(99)a. inuit tuqup-pai
people.Abs kill-Tr.Ind.3s.Erg.3p
"He killed the people."

b. inun-nik tuqut-si-vuq
people.Instr kill-AP-Intr.Ind.3s.Abs
"He killed people."

Antipassive objects in some languages are less affected by the action of the verb than in transitive constructions, as in the case of the following examples from Chuckchee.

Chuckchee (Palmer 1994:182)

(100)a. *e*tl*e*g-e **keyng-*e*n** penr*e*-nen
father-Erg bear-Abs attack-3s.3s.Aor
"Father attacked the bear."

b. *e*tl*e*g-*e*n penr*e*-tko-g'e **kayng-et*e***
father-Abs attack-AP-3s.Aor bear-Dat
"Father ran at the bear."

Campbell (2000) notes a similar semantic alternation in K'iche'. The antipassive oblique is less affected by the action of the verb.

K'iche' (Campbell 2000:267)

(101)a. S-0-u-tS'ay **ri** **a** **lu?** ri a Swa:n
Asp-1s.Abs-3s.Erg-hit the Hon Peter the Hon John
"John hit Peter."

b. ri a Swa:n S-0-tS'ay-on **tS-e:h** **ri** **a** **lu?**
the Hon John Asp-3s.Abs-hit-AP to.3s.Poss-to the Hon Peter
"John hit Peter." or "John was fighting with Peter."

Antipassive objects can have a partitive interpretation in some languages, such as Eskimo.

Eskimo (Palmer 1994:183-4)

(102)a. arna-p **niqi** niri-vaa
woman-Erg meat.Abs eat-Ind
"The woman ate the meat."

b. arna **niqi-mik** niri-NNiq-puq
woman.Abs meat-Instr eat-AP-Ind
"The woman ate some of the meat."

Benua (1995) argues that it is aspect and not specificity of the direct object which is relevant in Yup'ik. Unlike their transitive counterparts, antipassives can have an irresultative or non-completetive reading. (103a) implied that Lucy expected Mary to arrive and that Mary did in fact arrive. (103b), on the other hand, has no such implication.

Yup-ik (Benua 1995:33)

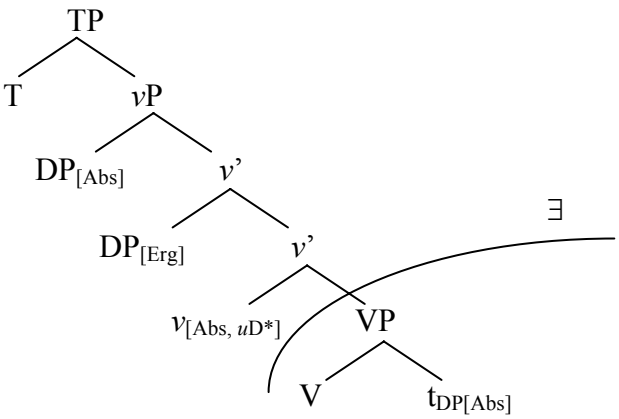
(103)a. Lucy-m **Mary-q** utaqallrua.
Lucy-Erg Mary-Abs wait.for.Past.Ind.3s.3s
"Lucy waited for Mary."

b. Lucy-q **Mary-mek** utaqallruuq.
Lucy-Abs Mary-Obl wait.for.Past.Ind.3s

"Lucy waited for Mary."

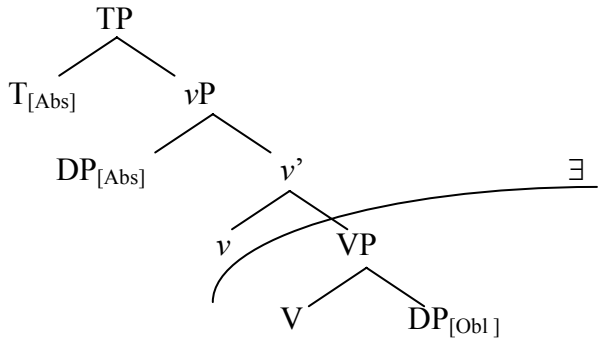
The specificity and scope facts are easily accounted for within the analysis I have proposed in this paper. Transitive *v* has an EPP feature, which forces an absolutive object to raise to the *v*P phase edge. At LF, these objects will receive a presuppositional reading, as per Diesing's (1992) Mapping Hypothesis. An absolutive QP will also take scope over the ergative, since it c-commands the ergative DP at LF.

(104)



In contrast to this, since intransitive *v* does not carry an EPP feature, the oblique object in an antipassive remains inside VP and will undergo Existential Closure at LF. The narrow scope interpretation of oblique QPs is also accounted for, since they remain in their base positions inside VP.

(105)



The aspectual alternations seen in some languages can also be subsumed under this analysis. Building on work by Tenny (1987, 1994), Van Voorst (1988), Borer (1994) and others on the role of direct objects in delimitation of events, Ritter and Rosen (2000) have proposed that when the verb is delimited and the object is specific, the object raises to an functional projection above VP to check structual case and receive an event role. This position is the outer specifier of *v* in the analysis I have proposed. In antipassives, when the verb is not delimited, the object remains in VP, where it receives inherent case.

7. Conclusion

In this paper, I have proposed a typology of syntactic ergativity based on how subject properties of ergative and absolutive DPs are derived. I proposed that there are two types of ergative language with respect to how absolutive case is assigned. In T-type ergative languages, absolutive case is checked uniformly by T. In *v*-type languages, T checks absolutive case in intransitive clauses and *v* in transitive clauses. In *v*-type languages, absolutive DPs in transitive clauses function essentially as direct objects, while it is the ergative DP which displays the behavior of a subject. By virtue of being merged in external argument position, i.e. the highest argument position in the clause, the ergative DP is able to bind VP-internal reflexives and serve as an imperative or hortative addressee. In *v*-type languages, PRO also can appear in the position for the ergative nominal and absolutive case is available for checking with an overt absolutive DP inside VP.

In T-type languages, on the other hand, absolutive DPs display more subject-like behavior, due to the fact that the source of their case is always T. The chief empirical difference between T- and *v*-type languages is that PRO must appear in the absolutive slot in the former but not in the latter. This is because nonfinite T does not have a case feature. In T-type languages, in which absolutive case is always checked by T, this case is not available for checking with an overt DP in a nonfinite clause.

I proposed an additional parameter to account for Dyirbal. Although this language displays the morphological properties of a *v*-type language, absolutives in Dyirbal have more subject properties than in other *v*-type languages. I showed that these properties can be accounted for by positing that T has an EPP feature in this language. This EPP feature draws the absolutive DP to the [Spec, TP] subject position, effectively placing the this DP in the highest A-position in the clause. This accounts for the absolutive pivot in *v*P coordination constructions and the fact that ergative DPs cannot bind absolutive reflexives.

In addition to the typology of ergativity based on case-checking and subject properties of absolutives and ergatives, I further proposed an account of the absolutive restriction on A'-extraction. In all syntactically ergative languages, I proposed that only transitive *v* has an EPP feature, which draws the absolutive DP to the outer specifier of *v*, from which position this DP can undergo further movement to [Spec, CP]. The Phase Impenetrability Condition and the Cyclic Linearization approach to locality ensure that ergative DPs and oblique objects in antipassives are not able to move from *v*P. This account of the extraction asymmetry also derives the interpretive differences between absolutive and oblique direct objects.

The main proposals presented in this paper are summarized below.

(106)

Case-checking/Distribution of Subject Properties	Languages
v-type ergativity	Eskimo
	Ixil Mayan
	Dyirbal
	Warlpiri
T-type ergativity	Seediq

	Mam Jacaltec
EPP feature on T	Dyribal

(107) Absolutive Restriction on A'-extraction
EPP feature on *v* only when it is transitive

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