Deriving morphological ergativity in Basque

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SUMMARY

This paper considers how ergative alignment in Basque differs from that found in other ergative languages and how this system may be derived. In the majority of ergative languages (E.g. Bandjalang, Warlpiri), all intransitive verbs have absolutive case subjects, regardless of any theta-related distinctions between agent and theme. In Basque, however, absolutive case appears only on subjects of unaccusative verbs. Unergative verbs pattern with transitive verbs in the sense that their sole (agent) argument is assigned ergative case. Previous analyses of ergativity (e.g. Chomsky 1991, Legate 2002) have related case marking to distinctions between transitive and intransitive verbs. Such analyses are not consistent with Basque data, however, given that the ergative-absolutive split in this language relates to verb agentivity rather than transitivity. I show that Basque can be analysed as a structural nominative-accusative language in which apparent ergative-absolutive patterning arises due to a particular property of non-agentive v (namely, the presence of Case).

RÉSUMÉ

Cet article s'intéresse à comment l'alignement ergatif en Basque diffère de celui des autres langues ergatives et comment ce système particulier pourrait être dérivé. Dans la majorité des langues ergatives (e.g. Bandjalang, Warlpiri) tous les verbes intransitifs marquent leur sujet avec le cas absolutif, sans tenir compte de la distinction entre les différents rôles thématiques possible (e.g. agent, patient/thème, etc.). Dans la langue Basque, cependant, le cas absolutif est attribué seulement au sujet des verbes inaccusatifs. En fait, les verbes inergatifs opèrent comme les verbes transitifs puisque leur unique argument (i.e. un agent) reçoit le cas ergatif. Les études antérieures sur l'ergativité (e.g. Chomsky 1991,Legate 2002) ont corrélé l'attribution des cas grammaticaux avec la distinction entre les verbes intransitifs et transitifs. Toutefois, de telles analyses ne sont pas consistantes avec les données en Basque, étant donné que l'ergativité scindée dans la langue est interreliée au concept d'agentivité plutôt qu'à celui de la transitivité. Ainsi, je démontre ici que le Basque peut être considéré comme une langue de type nominatif-accusatif dans laquelle un alignement de type ergatif fait surface uniquement en raison d'une propriété particulière du petit v non-agentif (c'est-à-dire la présence d'un cas grammatical).

1 INTRODUCTION

One of the properties which set Basque apart from its neighbouring Indo-European languages is its Ergative-Absolutive case marking system. The main contrast between Ergative-Absolutive and Nominative-Accusative languages lies in subject-object patterning: in ergative languages (e.g. Basque, Inuktitut, Warlpiri) intransitive subjects pattern with transitive objects, whilst in accusative languages (E.g. English, French) transitive and intransitive subjects pattern together. This is summarized in Table 1.

Table 1: Ergative and Accusative alignment and case marking patterns

	Subject-object patterning	*Morphological case marking*
Accusative languages	Intransitive subject - Transitive subject	Nominative (Transitive object-Accusative)
Ergative languages	Intransitive subject - Transitive object	Absolutive (Transitive subject-Ergative)

Subjects of Basque transitive verbs are case marked ergative (suffix -k), whilst objects of transitives and subjects of intransitives receive absolutive case (null suffix). Examples are given in (1). *Medikua* in (1a) is case marked ergative as the subject of the transitive verb *beldurtzen*, whilst the object *pirata* has a null (absolutive) suffix. In the intransitive example in (1b), the subject *pirata* again has absolutive case.

(1)   a.   Medikua-k pirata-Ø   beldurtzen du.
                doctor-ERG pirate-ABS frighten   Aux.
                'The doctor frightens the pirate.'
        b.   Pirata-Ø   abiatzen da.
                pirate-ABS depart   Aux.
                'The pirate departs.'
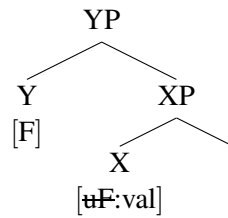
(Sanesteban et al. 2010, p.1)

This paper is organized as follows: Section 2 discusses how unergative-unaccusative distinction in intransitives pertains to case marking in Basque, Section 3 outlines relevant syntactic and morphological characteristics of the language, Section 4 deals with the distinction between syntactic and morphological ergativity and in Sections 5 onwards I discuss the specifics of ergative-absolutive case assignment.

1.1 ASSUMPTIONS REGARDING FEATURE VALUATION

As according to Chomsky (2000), I consider feature interpretability as synonymous with feature valuation. That is to say, all features bearing a value are interpretable and those features which are unvalued are also uninterpretable, and must receive a value from another syntactic item in order for
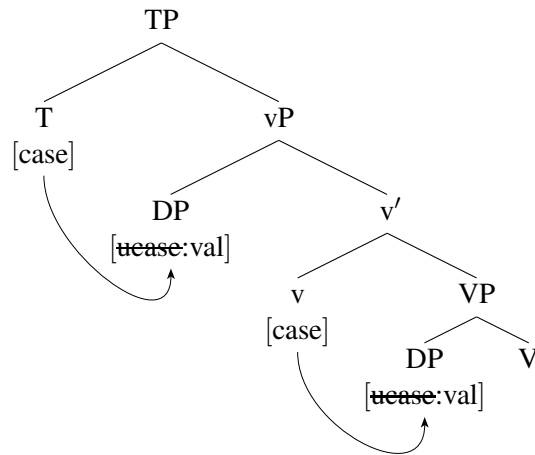
the derivation to converge. Following Wurmbrand (2012) I assume that uninterpretable features on syntactic items are valued in a downward fashion via a mechanism of 'Reverse Agree', in which an item X bearing an uninterpretable feature F receives a value if and only if it is c-commanded by an item Y with a matching interpretable value, and there is no intervening item between Y and X which also requires a value F. Reverse Agree is illustrated in (2).

(2)   Reverse Agree

$$
\begin{array}{c}
\text{YP} \\
\swarrow \qquad \searrow \\
\text{Y} \qquad\qquad \text{XP} \\
\text{[F]} \qquad\quad \swarrow\ \ \searrow \\
\qquad\qquad \text{X} \\
\qquad\qquad \text{[\sout{uF}:val]}
\end{array}
$$

Following Legate (2002), I assume that a case value is uninterpretable on a DP upon entering a derivation, but interpretable on a case-assigning head such as *v* or T; (3).

(3)   Valuation of case

$$
\begin{array}{c}
\text{TP} \\
\text{T} \qquad\qquad \text{vP} \\
\text{[case]} \qquad \text{DP} \qquad\qquad v' \\
\qquad \text{[\sout{ucase}:val]} \qquad v \qquad\qquad \text{VP} \\
\qquad\qquad\qquad \text{[case]} \qquad \text{DP} \qquad \text{V} \\
\qquad\qquad\qquad\qquad \text{[\sout{ucase}:val]}
\end{array}
$$

With regards to valuation of case, I assume structural case to be assigned by Reverse Agree, whilst assignment of inherent case (i.e. that which is associated with theta-role rather than structural position) is synonymous with theta-role assignment and as such may be assigned under any configuration under which a theta-role is assigned. This may not necessarily be a Reverse Agree configuration (e.g. assignment of agent theta role from *v* to its specifier; (4)).

(4)   Inherent case assignment

vP
├── DP
│   θ role: AGENT, case
└── v′
    ├── v
    └── VP
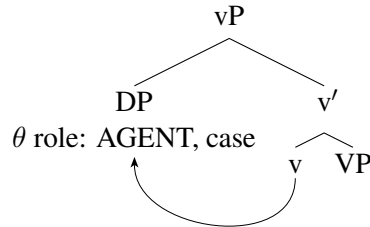
Section 5.2 discuses whether case assignment in Basque is structural, as in (3) or inherent, as in (4).

2   THE UNERGATIVE-UNACCUSATIVE DISTINCTON

Whilst ergative case marking is found in approximately a quarter of the world's languages (Song, 2001), ergative languages may differ with regards to how they treat the unergative-unaccusative split. Unergative and absolutive verbs are akin in the sense that both take a single argument, but differ with regard to the theta role assigned to that single argument. The sole argument of unergative verbs is commonly considered as an agent or external argument, merged in (spec vP) (Larson 1988). The single argument of an unaccusative is an internal theme argument, merged a complement to V. This is shown in (5).

(5)   Merge sites of external (agent) argument and internal (theme) argument

vP
├── AGENT
└── v′
    ├── v
    └── VP
        ├── THEME
        └── V
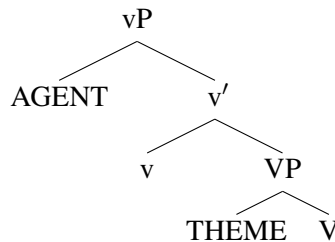
Thus unergative verbs can be thought of as patterning semantically with transitive verbs (in terms of the theta role of the subject) and transitively with unaccusative verbs (in terms of the number of arguments present). In most ergative languages, all intransitive subjects, regardless of the unergative-unaccusative distinction, take absolutive case, as is shown in (6) with Bandjalang (Parna-Nyugan) (Song 2001, p.185). In (6b) the verb *ba* 'eat' has an absolutive subject when it is unergative, as opposed to an ergative subject (6a) when transitive.

(6)   a.   mali-yu   ba:bam-bu mala-Ø   bulan-Ø   ba-ila.
                that-ERG child-ERG that-ABS meat-ABS eat-PRS
                'The child is eating the meat.'
        b.   mala-Ø   ba:bam-Ø   ba-le-ila.
                that-ABS child-ABS eat-PRS
                'The child is eating.'

In Basque however, unergatives pattern with transitives in the sense that the sole (agent) argument is assigned ergative case, as is the subject of a transitive verb, as in (7).[1]

(7)   Medikua-k igeri egiten du.
       doctor-ERG swim Aux.
       'The doctor swims.'

(Santesteban et al. 2010, p.1)

As was seen in the transitive sentence in (1a), the agentive subject is assigned ergative case, regardless of whether or not a theme argument is present. As was the case in (1b), when the sole argument of an (unaccusative) predicate is the theme, absolutive case is assigned.

3   OVERVIEW OF BASQUE SYNTAX AND VERB AGREEMENT

Ergativity in Basque is also reflected in agreement morphology in finite clauses. Basque typically has a periphrastic verbal form,[2] whereby subject and object agreement are hosted on a finite auxiliary. Two different auxiliary verbs are used in Basque: unaccusative verbs are conjugated with *izan* 'to be', whilst transitive and unergative verbs are conjugated with *edun* 'to have'.[3] *Edun* is found when the subject of the clause is ergative; *izan* when the subject is absolutive. In other words, *edun* occurs where an ergative DP is present; if only an absolutive DP is present, *izan* is found instead. The auxiliary must agree in number, person and gender with the subject as well as in number with any object present. See examples in (8).[4]

(8)   a.   Jon-ek   dantzatu du.
             Jon-ERG danced   Aux.3Sg.E
             'John danced.'
       b.   Nekane-k   Miren   eta Jon   ikusi ditu.
             Nekane-ERG Miren-ABS and Jon-ABS seen Aux.Pl.3Sg.E
             'Nekane saw Miren and Jon.'
       c.   Miren   eta Jon   etorri dira.
             Miren-ABS and Jon-ABS came Aux.3pl.A
             'Miren and Jon came.'
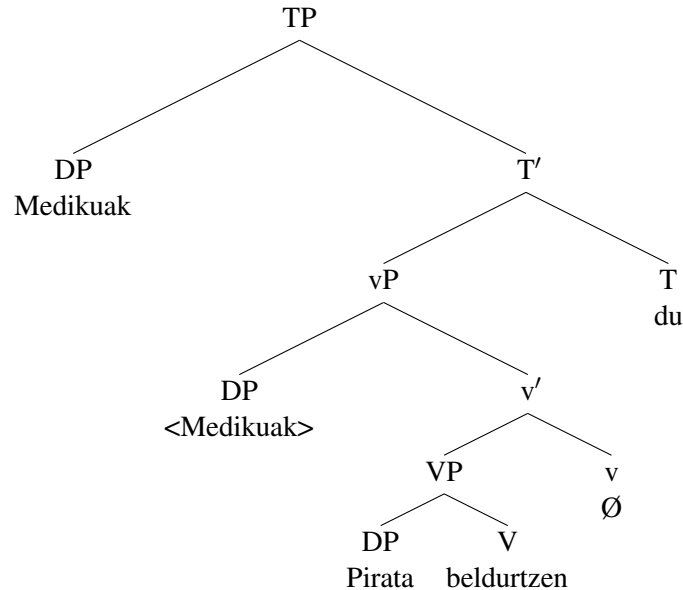
(Rezac et al. 2010, p.5)

Basque is a head-final language which takes a specifier to the left of the head; see (9), for the transitive sentence in (1a) *Medikuak pirata beldurtzen du*. Basque is also pro-drop.

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[1] Some eastern dialects of Basque follow the pattern found in Bandjalang, i.e. absolutive case is assigned to subject of unergative verbs as well as unaccusatives. All examples discussed here are from the Western dialect.

[2] Basque also has a small number of synthetic verb forms which do not require an auxiliary to spell-out tense/agreement.

[3] *edun* is never found in its non-finite form.

[4] I henseforth gloss auxiliaries as follows: [Aux. singular or plural object agreement (if present).subject agreement.E(ergative) or A(absolutive].

(9)   Structure of Basque[5]

```
                              TP
                  ┌───────────┴───────────┐
                 DP                       T′
              Medikuak            ┌────────┴────────┐
                                 vP                 T
                          ┌───────┴───────┐         du
                         DP              v′
                      <Medikuak>    ┌─────┴─────┐
                                   VP           v
                              ┌─────┴─────┐      Ø
                             DP           V
                           Pirata     beldurtzen
```

4 SYNTACTIC VERSUS MORPHOLOGICAL ERGATIVITY

A distinction is typically made between languages which are morphologically ergative and those which are syntactically ergative. 'Morphological ergativity' characterises languages in which ergativity is reflected in case marking patterns, as is seen in Basque in examples (2) and (7). Syntactic ergativity refers to syntactic behaviour of absolutive DPs. In languages categorised as 'syntactically ergative' such as Dyirbal (Parna-Nyugan), absolutive DPs behave akin to nominative DPs in accusative languages such as in English, i.e. they have properties typically associated with subject hood, as listed in (10) with examples (Dixon 1994, discussed in Aldridge 2008).

(10)   Behaviour of absolutive DPs in syntactically ergative languages in Dyirbal (Dixon 1994, discussed in Aldridge 2008)

   a.   Absolutives can control PRO (10a-i), whereas the equivalent construction is not allowed in an accusative language (10a-ii).
      (i)   nguma   banaga-nyu   [PRO yabu-nggu   bura-li].
             father-ABS return-(ABS) [PRO mother-ERG see
             'Father returned in order for mother to see (him).'

                                                                          (Dixon 1994, p.155)

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[5] There is evidence from the Topic-focus word order found in Basque that the finite verb and topic (in this example *Medikuak*) raise to CP. I have shown here the structure as far as TP only for the sake of clarity. The issues concerning raising to CP are not relevant to my discussion or analyses. I will also be assuming TP as the locus of both tense and subject agreement. The locus of object agreement, whilst not relevant to the analysis which I will present, I assume to be *v*.

(ii) *Mother returned in order for [father to see PRO].

b. Absolutives can undergo VP co-ordination (10b-i). As is the case with control, this
   configuration is also not allowed in accusative languages, (10b-ii).

   (i)   nguma   yabu-nggu   buran banaganyu.
         father-ABS mother-ERG saw   returned
         'Mother saw father and (father) returned.'

                                                                         (Dixon 1994, p.155)

   (ii) *Mother saw father$_i$ and PRO$_i$ returned.

c. Absolutive DPs, but not ergative DPs, can undergo relativisation. According to Kee-
   nen & Comrie's (1977) Accessibility Heirarchy, subjects are the most 'relativisable'
   grammatical function. If a language allows only one function to undergo relativisa-
   tion, then it is the subject which does so, (10c-i) . An ergative subject DP cannot be
   directly relativised in Dyirbal. The only way to do so is by means of the antipassive
   construction, in which the subject has absolutive case marking and the object is dative,
   (10c-ii).

   (i)   nguma   [___   banaga-ngu]   yabu-nggu   bura-n.
         father-ABS (ABS) return-REL.ABS mother-ERG see
         'Mother saw father who was returning.'

                                                                         (Dixon 1994, p.169)

   (ii) yabu   [bural-nga-ngu nguma-gu] banaga-nyu.
         Mother-ABS see-AP-REL   father-DAT return
         'Mother, who saw father, was returning.'

                                                                         (Dixon 1994, p.170)

Basque does not share the properties of syntactic ergativity that are seen in Dyirbal. Unlike in
Dyirbal, for instance, ergative DPs may control PRO (cf. 11).

(11) a. Gu-k   ez   dakigu [PRO nora   joan].
          we-ERG Neg know   [ERG where go]
          'We do not know where to go.'
      b. Peru-k   [PRO extera joan] nahi du.
          Peru-ERG [ERG home go]   want Aux.sg.3sg.E
          'Peru wants to go home.'

                                                                         (San Martin 2000, p.4)

Ergative DPs are also able to undergo relativisation in Basque, unlike Dyirbal (cf.12a). Absolutive
DPs can also be relativized (cf. 12b, c) Thus there seems to be no restriction upon relativization on
the basis of case marking.[6]

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[6] Examples in (12) show only transitive and unaccusative constructions. It is expected that subjects of unergative verbs
are also relativisable, with ergative case marking retained on the subject, as is the case in (12a).

(12)   a.   Transitive, relativisation of subject

        [liburua   irakurri du]   gizon-ak   egia daki.
        [book-ABS read   Aux.sg.3sgE] man-ERG truth know
        'The man [that has read the book] knows the truth.'

                                                      (Rebuschi 2006, p.6)

       b.   Transitive, relativisation of object

        [gizon-ak   irakurri du]   liburua.
        [man-ERG read   Aux.sg.3sg.E] book-ABS
        'The book [that the man has read].'

                                                      (Rebuschi 2006, p.6)

       c.   Unaccusative

        [etorri gizona]   frantsesa da.
        [come man-ABS] French   Aux.3sg.A
        'The man who has come is French.'

                                                         (King 1994, p.403)

It is therefore generally accepted in literature (e.g. Rezac et al. 2010) that Basque is structurally accusative, i.e. that ergative DPs function as grammatical subjects. The most contentious question regarding ergativity in Basque relates to how case is assigned. I will argue in this paper that Basque is underlyingly a nominative-accusative language like its Indo-European neighbours, but that an ergative case marking pattern surfaces due to properties of the verbal domain.

5   ASSIGNMENT OF ERGATIVE CASE

5.1   PREVIOUS ACCOUNT OF ERGATIVE-ABSOLUTIVE MARKING

Chomsky (1991) claims that the distinction between nominative-accusative and ergative-absolutive languages lies in the selectional requirement of AgrS and AgrO. In a transitive clause containing two DPs, both AgrS and AgrO are present and assign case to the subject and object respectively. If only one DP is present, however, accusative and ergative language differ with respect to which Agr projection is 'active' and hence able to assign case. If AgrS is active, then the single DP has the same properties as the subject of a transitive clause, resulting in an accusative language. If AgrO is active, then the DP will share properties of objects of transitive clauses, hence the language is ergative. Bobaljik (1993) introduces the notion of the 'Obligatory Case Parameter' to refer to the functional projection which is active when only one argument is present. As such, Chomsky's analysis (summarized in Table 2) is viewed as a parameter-setting model of case assignment.

    This analysis is problematic for Basque since a single DP in an intransitive clause receives a different case value depending on the type on intransitive clause (i.e. the sole (agentive) argument of unergative predicates receives ergative case whilst the sole(theme) argument of unaccusatives receives absolutive case).

    A more recent analysis of ergativity is that of Legate (2002, 2008), who reduces ergative-

absolutive case marking in part to a morphological phenomenon. Legate assumes that absolutive case is not assigned in the syntax, and that structural case is assigned in exactly the same way as in a nominative-accusative language, i.e. nominative by finite T and accusative by transitive *v*, as in (13).

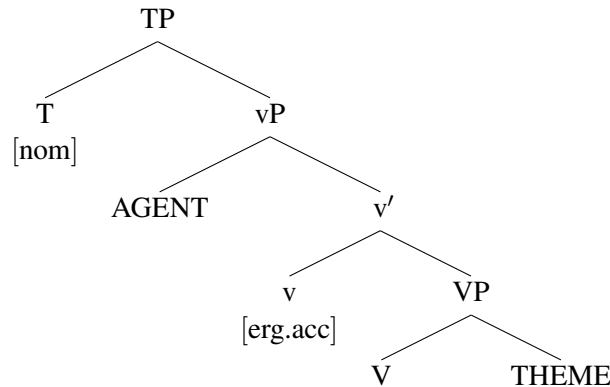(13)   Case values in ergative languages (Legate 2002, 2008)

```
                        TP
                      /    \
                    T       vP
                 [nom]     /   \
                      AGENT     v′
                               /  \
                              v    VP
                          [erg.acc] /  \
                                   V    THEME
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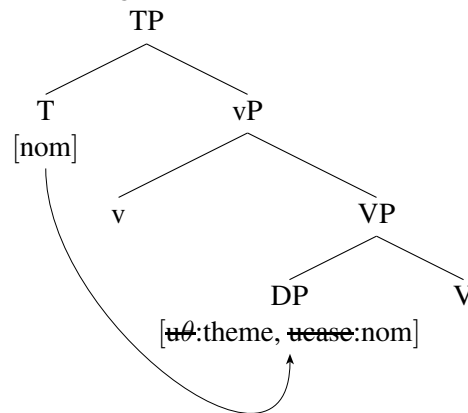
Table 2: Case assignment in ergative and accusative languages

	Case assigned by AgrS	*Case assigned by AgrO*	*Obligatory Case Parameter*
Accusative languages	Nominative	Accusative	AgrS
Ergative languages	Ergative	Absolutive	AgrO

Ergative languages however differ from nominative-accusative languages in two ways.The first is morphological: nominative and accusative cases have the same spell-out form.The second distinction concerns transitive *v*, which, Legate claims assigns two case values in an ergative language. Transitive *v* inherently assigns ergative case to its specifier (i.e. to the external agent argument) and accusative case to direct object (i.e. the complement to V; the theme argument). In intransitive clauses, however, v has no case features. The theme argument therefore receives a nominative case value from T. Since nominative and accusative have the same spell-out form, the single theme DP has the same morphological surface form as it does when an agent DP is present. This is illustrated in (14).

(14) a. Case assignment in a transitive clause

TP

T
[nom]

vP

DP
[u*θ*:agent, ~~ucase~~:erg]

v′

v
[erg,acc]

VP

DP
[u*θ*:theme, ~~ucase~~:acc]

V
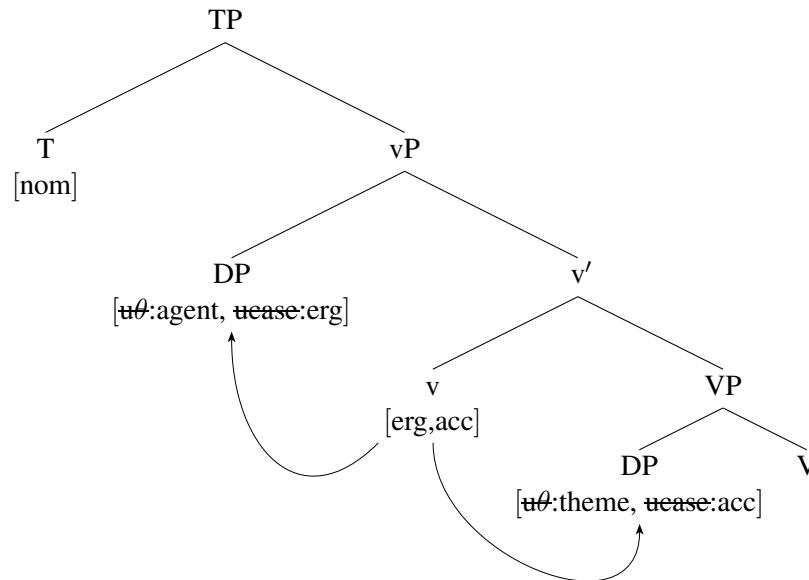
b. Case assignment in an intransitive (unaccusative) clause

TP

T
[nom]

vP

v

VP

DP
[u*θ*:theme, ~~ucase~~:nom]

V

The problem with adopting Legate's analysis for Basque is the same as that with Chomsky/Bobalijk model, namely, that it does not account for the unergative-unaccusative distinction.[7] Nonetheless,

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[7] Legate's analysis is based upon Warlpiri (Australian), which, like most ergative languages, sees absolutive case marking on the subjects of all intransitive (both unergative and unaccusative) verbs; (i).

(i) a. Nyuntu-rlu-npa-ju   ngaju nya-ngu.
     2-ERG-1SG.SUBJ-2SG.OBJ 1.ABS see-PAST
     'You saw me.'
    b. Ngaju-rna   parnka-ja.
     1.ABS-1SG.SUBJ run-PAST
     'I ran.'

(Legate 2002, p.126)

a slight modification to Legate's analysis may account for the case marking patterns in Basque. If we are to reformulate the distinction between transitive *v* and intransitive *v* as a distinction between agentive *v* (i.e. that which assigns as agent theta-role) and non-agentive *v*, we could say instead that it is agentive *v* (present in transitive and unergative clauses) in Basque which has two case values (ergative and accusative) and non-agentive *v* (present only in unaccusative clauses) which has no case value. In a Basque transitive clause, therefore, ergative case is assigned to the subject DP and accusative to the object, as per Legate's original analysis. In a Basque unergative clause such as (7) and (8a), ergative case is assigned to the subject by *v*, and accusative case is unassigned. This account implies that case marking in Basque is inherent as opposed to structural. Section 5.2 discusses evidence from gerund constructions which suggests that ergative case in Basque is in fact structural, such thatneither Legate's original analysis nor the aforementioned adaptation of it can account for gerund data. An alternative analysis for Basque is proposed in Section 5.3.

5.2   ERGATIVE CASE IN BASQUE: STRUCTURAL OR INHERENT?

There is debate in the literature as to whether case in Basque is structural (i.e. dependent upon structural position of each case-valued DP) or inherent (dependent upon thematic role of the DP). Levin (1983) and Laka (2006a) argue that case marking is Basque is inherent and is assigned by a theta role assigner to its assignee. As such, we would predict a direct correlation between thematic role and case assignment. This is indeed exactly what we find: as discussed at the end of the last subsection, a 'transitive- intransitive' distinction is not sufficient to account for case marking patterns in Basque. As shown by examples in (1), (7) and (8), case in Basque seems to be related to theta role: DPs assigned an agent theta role are also assigned ergative case (subjects of transitive and unergative constructions) and DPs assigned a theme role are assigned absolutive case (objects of transitive constructions and subjects of unaccusative constructions). Laka takes the unergative-unaccusative distinction as constituting evidence against a structural analysis of case in Basque: "if the subject [of an unergative predicate] carries absoutive case, then we have a clear instance of case/theta role dissociation, and we can conclude that case is structural'....in intransitive clauses, therefore 'ergative case on the subject is not predicted" (p.377). Laka assumes that case values therefore are present on *v* (i.e. the assigner of theta roles), but does not present an exact analysis of how ergative and absolutive are assigned (although the adaptation of Legate's analysis for Basque discussed in 5.1 could work here). The problem is that there are certain structures in Basque (namely perceptive gerund constructions) in which the case marking patterns observed would not be predicted under such an analysis. Rezac et al. (2010) argue that case in Basque is structural on the basis of the correlation between ergative case and finiteness; namely that ergative case-marked DPs never appear in the Basque nonfinite *-tzen* perceptive gerund construction, even though an ergative DP appears in an equivalent finite construction. Of the two sentences in (15), only in (15a) is the verb *harrapa* 'catch' finite (note the presence of the auxiliary *dituzte* which is lacking in the non-finite equivalent in (b)). And notably, it is only (15a) in which the subject of *harrapa* (*katu* 'cat') takes ergative case marking. In (15b), *katu* must be in absolutive case; ergative case is ungrammatical in this environment. (Note that the -ak suffix in Basque is a plural marker).

(15) a. [Katu-ek saguak   harrapa-tu dituzte]   la ikusi dut.
          cats-ERG mice-ABS catch   Aux.pl.3p.lE that seen Aux.sg.1sg.E
          'I saw that the cats caught the mice.'

      b. [Katuak/*-ek   saguak   harrapa-tzen] ikusi ditut.
          cats-ABS/*ERG mice-ABS catch-ing   seen Aux.pl.1sg.E
          'I saw the cats catching the mice.'

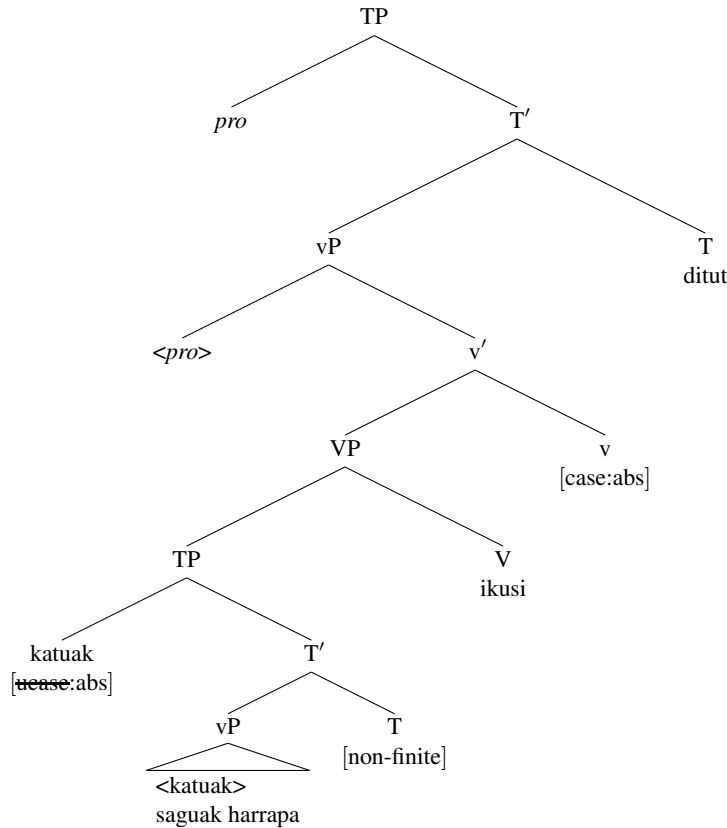<div align="right">(Rezac et al. 2010, p.4)</div>

As 'catch' is a transitive verb, it is to be expected that its subject should be marked for ergative case. The DP *katu* is the agent regardless of whether its theta-role assigning verb is finite or not. This distinction is therefore not predicted under an analysis of inherent case, such as that of Laka or Legate. The phenomenon in (15b) is found in all - *tzen* perceptive gerunds; two further examples are given in (16) and (17).

(16) Zer   ikusi duzu?   [Miren   pianoa   jo-tzen].
      what-ABS seen Aux.sg.2plE [Miren-ABS piano-ABS play-ing]
      'What did you see? Miren playing the piano.'

(17) Azken hilabeteotan [gazteak   kale erdian   janz-ten] ikusi dut.
      last   months-in   young.pl-ABS street middle-in dress-ing] seen Aux.sg.1sg.E
      'These last months, I have seen young people dressing in the middle of the street.'

<div align="right">(Rezac et al. 2010, p.8)</div>

Rezac et al. conclude that 'the source of ergativity lies in the [T] system, since this is where *-tzen* gerunds differ from structures that license the ergative' (p.9). T must be missing (or impoverished) in the gerund construction, such that ergative case is not available. How, then, is absolutive case assigned? The short answer is: in the same way in which accusative case is assigned in equivalent gerund constructions in English such as 'I saw [them catching the mice]', i.e. by Exceptional Case Marking (ECM) from *v* on the perception verb (Basque *iku* 'see'). For Rezac et al., the clearest evidence for ECM is the inability of *-tzen* gerunds to license overt subjects in any other environment. Other than perception verbs such as 'see', they appear as control complements to verbs such as *utzi* 'let', *ahatzu* 'forget' and *lagundu* 'help' (Rezac et al., p.9). In all such constructions, however, the subject of the *-tzen* gerund can only be PRO. The overt subject (*katuak*, *Miren* and *gazteak* in (15b), (16) and (17) respectively) is therefore assigned case by the perception verb 'see' under ECM in the same way that them is case marked in the English gerund construction *I saw [them catching mice]*. ECM case assignment to the embedded subject *katuak* in (15b) is shown in (18).

(18)   Katuak saguak harraptzen ikusi ditut.

```
                              TP
                            /    \
                         pro      T'
                                /    \
                              vP      T
                            /    \    ditut
                        <pro>     v'
                                /    \
                              VP      v
                            /    \    [case:abs]
                          TP      V
                        /    \    ikusi
                    katuak    T'
                 [ucase:abs] /  \
                           vP    T
                         /    \  [non-finite]
                      <katuak>
                    saguak harrapa
```
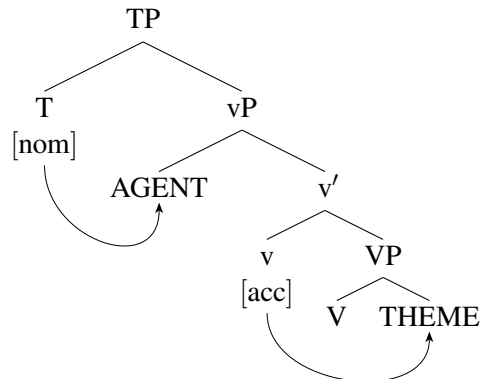
As far as my discussion is concerned, what is most important is that ergative case in Basque must be associated with T (as is nominative case in English), such that ECM is required to license a subject of a gerund complement. We can conclude that ergative case is Basque is structural, and not inherent. As such, an analysis of case along the lines of that of Legate is ruled out. Some other factor must account for the apparent correlation between ergative-absolutive case and agent-theme theta roles.

5.3   AN ALTERNATIVE ANALYSIS OF CASE ASSIGNMENT FOR BASQUE

Something to note from the analysis of ECM in gerund constructions and the ergative- finiteness correlation is that, in these regards, the Basque case is somewhat similar to nominative-accusative system of English. The difference between Basque and English however is that Basque theme DP, whether subjects or objects of their clause, always receive the same case (absolutive), whilst English theme DPs take accusative case only if they are objects of a transitive clause. Agent DPs are always assigned ergative case in finite clauses, just as they are always assigned nominative case in nominative-accusative languages. The properties giving rise to ergativity in Basque must
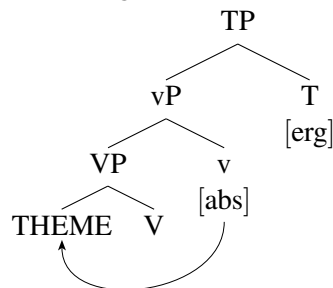
therefore be associated with *v* (even though *v* is not responsible for assigning ergative case). My analysis is one in which ergative case is assigned by finite T and absolutive by *v*, just as nominative and accusative are assigned in English; (19).

(19)   Case assignment in English

```
                    TP
                  /    \
                 T      vP
              [nom]    /  \
                 \  AGENT   v′
                  \___↑    /  \
                        v     VP
                     [acc]   /  \
                       \    V   THEME
                        _____↑
```
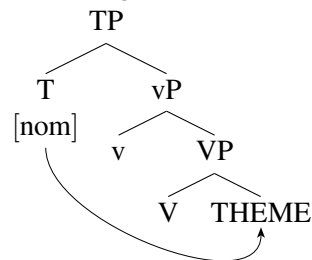
In Nominative-Accusative languages, accusative case is available if and only if *v* is agentive (i.e. assigns an agent theta-role to its specifier). In an (aptly named) unaccusative, accusative case is not assigned due to the lacking of an (external) agent argument. Basque can be said to differ from Nominative-Accusative languages in that it lacks a non-case assigning *v*. As a result, absolutive case is always assigned to the complement of V (i.e. the theme/object), even in the absence of an agent in the specifier of *v*. Absolutive case is available but unassigned only in unergative constructions, where no theme is present. Similarly, ergative case is unassigned in unaccusative constructions, since the sole DP (the theme) receives its case value from the close case assigning head, which is *v*. The difference between case assignment in Basque unaccusatives and unaccusatives in Nominative-Accusative languages is shown in (20a) and (20b) respectively.

(20)   a.   Case assignment in an unaccusative in Basque

```
                    TP
                  /    \
                vP      T
               /  \   [erg]
             VP    v
            /  \  [abs]
       THEME    V
          ↑\____/
```

        b.   Case assignment in an unaccusative in English

```
                TP
              /    \
             T      vP
          [nom]    /  \
             \    v    VP
              \       /  \
               \     V   THEME
                _____↑
```

Finite T in both Basque and English assigns case (in English 'nominative'; in Basque 'ergative') to the closest DP requiring a case value. In transitive or unergative constructions, this is the agent DP (subject). Case is assigned to the theme (or transitive object) by v (in English 'accusative'; in Basque 'absolutive'). In Basque, this case value is assigned regardless of whether v is agentive or not. In English, this case value is only assigned by agentive v. Non-agentive v lacks a case value, and as such the theme is reliant upon T for case. Since there is no intervening agent DP, case is assigned by T to the theme (subject) of an unaccusative construction. This analysis of case assignment in Basque can be summarized as in (21).

(21)   Basque can be analyzed as a nominative-accusative language which lacks a non-case as-
        signing v.

As such, there is in fact no reason theoretically not to refer to 'ergative' and 'absolutive' case in Basque and nominative and accusative respectively, but in order to avoid confusion, I will continue to use the terms 'ergative' and 'absolutive' for the remainder of this paper.

6   ACCOUNTING FOR MORPHOLOGICAL ERGATIVITY IN OTHER LANGUAGES

The model of ergative-absolutive case assignment in Basque presented in Section 5.3 cannot account for case marking patterns in Banjalang and Warlpiri, in which an intransitive subject receives absolutive case regardless of its theta-role. It is observed in both Banjalang (cf. 6) and Warlpiri (cf. 15) that the subject (agent) of an unergative predicate receives absolutive case, as does the subject (theme) of unaccusative predicate. This type of patterning can be explained by Legate's original analysis for Warlpiri, but not by the analysis for Basque which I have put forward (likewise, the pattern observed in Basque can be explained by my analysis but not by Legate's). This situation suggests that there may be no unique analysis of morphological ergativity which accounts for all ergative-absolutive patterns typologically. If we wish to apply the analysis for Basque in Section 5.3 to all other morphologically ergative languages, the problem to be solved is, why should absolutive, as opposed to ergative case marking be found on agent DPs of unergative predicates in languages like Warlpiri and Banjalang? As suggested by Legate, it may be that 'ergativity' per se is an epiphenomenon resulting from specific syntactic and morphological properties of each particular ergative language (e.g. lack of case assigning v in Basque; identical nominative and accusative spell-form plus an additional case value on transitive v in Warlpiri/Bandjalang). One further issue to be questioned regarding Legate's model is why the syntactic system for Warlpiri should distinguish between transitive and intransitive v with regards to case assignment as opposed to agentive and non-agentive v, as Nominative-Accusative languages (Basque included) do. Distinguishing between languages which pattern 'transitive - intransitive' and those which pattern 'agentive - non-agentive' is perhaps a crucial step is classifying types of morphological ergativity. I will not try to address such issues here however; the remainder of this paper will be concerned with further case marking quirks of Basque, namely ergative splits.

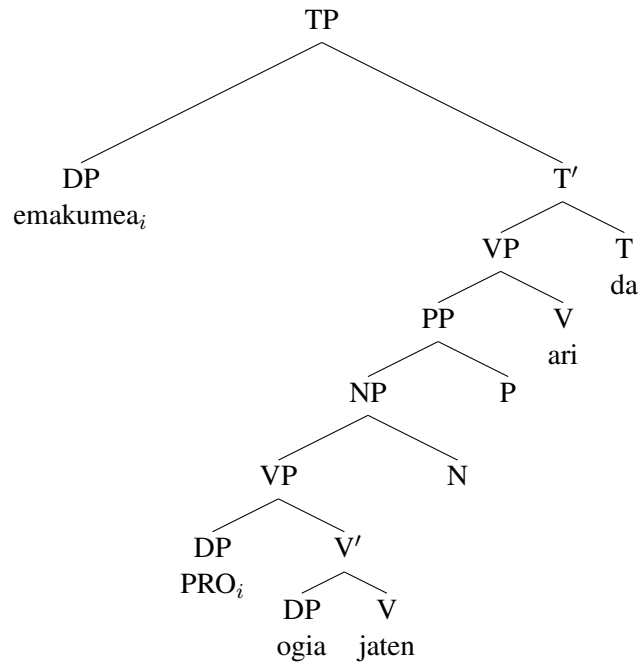## 7 SPLIT ERGATIVITY IN BASQUE: THE *ari* PROGRESSIVE

I now turn briefly to a case of apparent 'split' ergativity in Basque: the *ari* progressive construction. The Basque progressive aspectual marker *ari* has an effect upon the case which is assigned to the subject: the subject is always assigned absolutive case regardless of whether the verb is transitive, unergative or unaccusative (only in the latter would an absolutive subject be predicted). This is illustrated in (22).

(22)   a.   emakumea-k ogia   jaten du.
            woman-ERG bread-ABS eat   Aux.sg.3sg.E
            'The woman eats the bread.'
      b.   emakumea   ogia   jaten ari   da.
            woman-ABS bread-ABS eat   PROG Aux.3sg.A
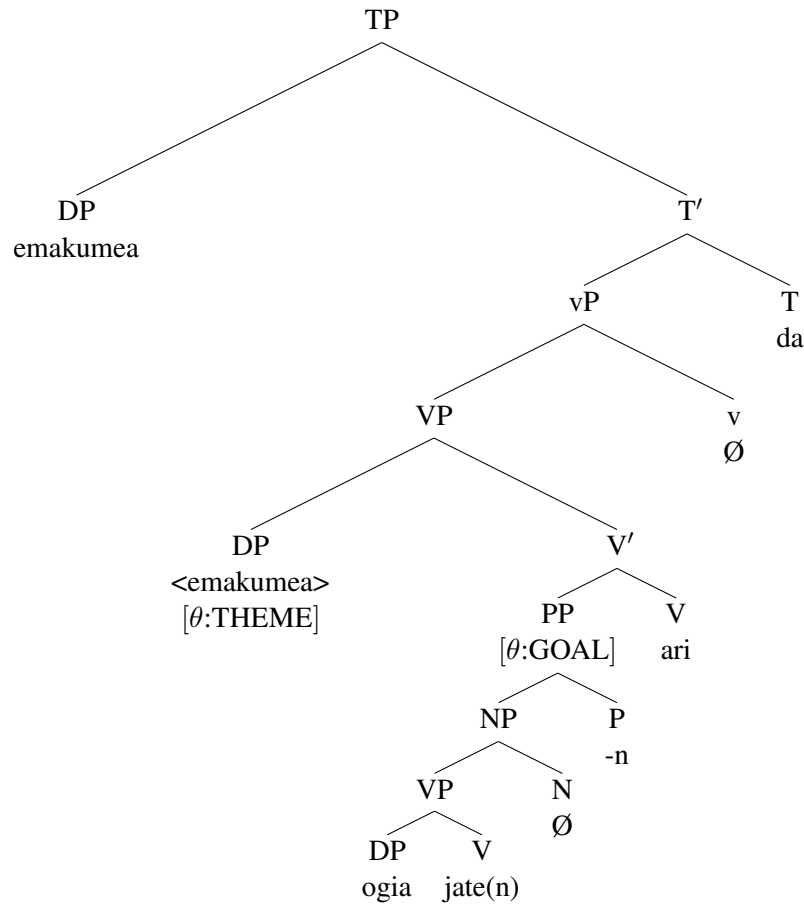   'The woman is eating the bread.'

(Laka 2006b, p.173)

Note that in (22b), absolutive case on the subject *emakumea* is somewhat unexpected given that *emakumea* is the agent of the predicate *jaten* and should therefore be assigned ergative case by T, just as it is in (22a). The absolutive/unaccusative auxiliary *da* is used in the progressive *ari* construction as opposed to the ergative *du* in (22a). Given the presence of an auxiliary (which hosts tense and agreement), the sentence in (22b) is finite so this case marking anomaly clearly cannot be due to a lacking of finiteness (as was the case with the *-tzen* gerund in Section 5.2). This is a typical case of aspect-based split-ergativity. As discussed by Dixon (1994 cf. Laka 2006b), changes in case marking of a transitive subject in the presence of an aspectual head in a common phenomena in ergative languages. The general pattern, according to Dixon is 'if a split is conditioned by tense or aspect, the ergative marking is always found either in past tense or perfective aspect' (p.99). The *ari* progressive has been treated in literature as an antipassive construction (e.g. Postal 1977, Alonso-Cortés 2002) but the most convincing analysis (for me) is that of Laka (2006b). Laka claims that *ari* is a main verb (as opposed to a functional aspectual head) which takes a prepositional complement in the form of a locative nominalised clause. As such, *ari* can be considered an unaccusative verb, which takes only a theme argument (*emakumea* in (22b)). This theme is the subject of the sentence and controls a PRO subject of the verb in the nominalised clause (*jaten* in (22b)). Laka's analysis is shown in (23).

(23)   Structure of *emakumea ogia jaten ari da* (adapted from Laka (2006b))

```
                              TP
              ┌───────────────┴───────────────┐
             DP                                T′
         emakumea_i                   ┌─────────┴─────┐
                                     VP                T
                              ┌───────┴───┐            da
                             PP            V
                       ┌──────┴──┐        ari
                      NP          P
                 ┌─────┴─────┐
                VP            N
           ┌─────┴─────┐
          DP           V′
         PRO_i      ┌───┴───┐
                   DP        V
                  ogia     jaten
```

This structure raises questions regarding the specifics of theta-role assignment: in particular, why should *ari* form a thematic relationship with an element in spec, TP? Furthermore, what is the thematic relationship between V and the PP/NP? I therefore adopt a slightly modified version of Laka's structure, in which *ari* assigns two theta roles: theme to the DP *emakumea* in spec, VP and goal to the PP/NP ogia *jaten* as a complement to V (illustrated in (24)). *ari* essentially functions as an unaccusative verb with both theme and goal arguments.

(24)   Case and theta role assignment in an *ari* progressive construction (revised)

```
                              TP
                   ┌───────────┴───────────┐
                   DP                       T′
                emakumea           ┌─────────┴──────┐
                                   vP                T
                            ┌──────┴──────┐          da
                            VP             v
                     ┌──────┴──────┐       Ø
                     DP             V′
                 <emakumea>    ┌────┴────┐
                 [θ:THEME]     PP         V
                           [θ:GOAL]      ari
                          ┌───┴───┐
                          NP       P
                      ┌───┴──┐     -n
                      VP      N
                  ┌───┴──┐    Ø
                  DP     V
                 ogia  jate(n)
```

8   SUMMARY

In this paper I have highlighted that the distinction between unergative and unaccusative predicates has important implications for ergative-absolutive case assignment in Basque. Whilst agent DPs are uniformly assigned ergative case and theme DPs absolutive case, the observation that ergative case marking is dependent upon finiteness of T shows that case assignment in Basque must be structural as opposed to inherent. I suggested that ergative-absolutive case assignment in Basque is identical to nominative-accusative case assignment; with the exception that non-agentive *v* has a case value in Basque which is lacking in Nominative-Accusative languages. This analysis for Basque, however, cannot account for Ergative-Absolutive languages such as Warlpiri in which subjects of unergative and unaccusative predicates have the same case value; this type of patterning is best explained by Legate's theory of case assignment. Finally, I consider the *ari* progressive construction, which gives rise to apparent split ergativity in Basque. Case assignment patterns can be accounted for by assuming *ari* to be a lexical (unaccusative) verb which establishes a thematic relationship with the subject. Case is then assigned as in a regular unaccusative construction.

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