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Person-based split ergativity in Nez Perce is syntactic

Abstract. Nez Perce is one among many ergative languages that consistently use nominative case, rather than ergative, for 1st and 2nd person transitive subjects. For the synchronic grammar of this type of ergative split, two major lines of analysis have been proposed. Morphological analyses approach the phenomenon as a case of syncretism between ergative and nominative in 1st and 2nd person; all transitive subjects are assigned an identical syntax. Syntactic analyses posit a featural or structural distinction between 3rd person subjects and 1st and 2nd person subjects, or the clauses containing them. On the basis of modification and coordination patterns, I argue that person-based split ergativity in Nez Perce requires a syntactic analysis. Comparison of the Nez Perce data with recent findings by Legate (2014) reveals variation among languages showing person-based split ergativity: some languages require a morphological analysis, and some (like Nez Perce) require a syntactic analysis. A treatment of the syntactic type of person-based split ergativity is proposed, making use of person-sensitive phrase structure as introduced by Bianchi (2006) and Merchant (2006).

1 Introduction

Many languages that show ergative marking for one class of transitive subjects also show nominative marking for another class of transitive subjects. This is the phenomenon of split ergativity. The split between the two classes may be made according to properties of the clause, such as aspect and tense, or according to properties of the subject, such as person. In a range of languages, the dividing line between ergative and nominative falls between 1st and 2nd person, on one hand, and 3rd person, on the other: 1st and 2nd person subjects are nominative, regardless of transitivity, whereas 3rd person subjects are ergative in a transitive clause. Nez Perce data exemplify this

pattern in (1) and (2). Subjects of all persons appear in the nominative case in intransitive clauses, (1). In transitive clauses, 1st and 2nd person retain the nominative case, (2a-b), while 3rd person subjects switch to ergative case, (2c).

(1) a. ’Iin kúu-se-∅.
1SG.NOM go-IMPERF-PRES
I am going.

b. ’Iim ’ee kúu-se-∅.
2SG.NOM 2SG.CLITIC go-IMPERF-PRES
You are going.

c. ’Ipí / Kátie hi-kúu-se-∅.
3SG.NOM / Katie.NOM 3SUBJ-go-IMPERF-PRES
She / Katie is going.

(2) a. ’Iin ’ipéwi-se-∅ Méli-ne.
1SG.NOM look.for-IMPERF-PRES Mary-ACC
I am looking for Mary.

b. ’Iim ’ee ’ipéwi-se-∅ Méli-ne.
2SG.NOM 2SG.CLITIC look.for-IMPERF-PRES Mary-ACC
You are looking for Mary.

c. ’Ip-ním / Kátie-nim pée-’pewi-se-∅ Méli-ne.
3SG-ERG / Katie-ERG 3/3-look.for-IMPERF-PRES Mary-ACC
She / Katie is looking for Mary.

Languages showing this type of ergative split are attested in nearly all the major hotspots of ergativity around the globe. In Australia, the pattern is instantiated by Dyirbal (Dixon 1972), perhaps the best-studied instance of a person-based split. In New Guinea, the pattern appears in Yimas (Foley 1991). In South Asia, it appears in Kham (Watters 1973, 2002), Maraṭhi (Deo and Sharma 2006, Dhongde and Wali 2009) and Punjabi (Bhatia 1993, Deo and Sharma 2006). In the Caucasus, it appears in Georgian (Nash 1997), Kharbadian (Colarusso 1992), and Udi (Schulze 2001). In the Amazon, it appears in Cashinahua (Dixon 1979) and Yaminawa (Valenzuela 2000). In Meso-America, it appears in Mocho’ Mayan (Palosaari 2011). In the Arctic, it appears in West Greenlandic (Fortescue 1984, 257-258), Siberian Yupik (de Reuse 1994, 28) and Alaskan Yup’ik

(Reed et al. 1977).[1] In the Pacific Northwest, besides Nez Perce, it appears quite generally in Salish languages (Czaykowska-Higgins and Kinkade 1998), where it has been prominently studied in Lummi (Jelinek 1993) and Halkomelem (Gerdts 1988, Wiltschko 2006).

Analyses of the person-based pattern of split ergativity are part of a broader investigation into the person-animacy effects classically described using Silverstein's hierarchy (Silverstein 1976). Originally framed primarily as a theory of split ergativity, this hierarchy establishes a ranking among nominal types in terms of their likelihood to display nominative, rather than ergative, in a split ergative system: 1st and 2nd person pronouns rank above 3rd person pronouns, and these in turn rank above proper nouns, which in turn rank above common nouns describing humans, common nouns describing non-human animates, and so on. As part of this overall research area, investigations of person-based split ergativity have followed two potentially complementary lines. One asks for the historical and/or functional motivations of patterns like (1)/(2) and other effects of Silverstein's hierarchy. The other asks how hierarchy effects are encoded in synchronic grammar.

This paper is a part of this second strand of research, and its goals are to illuminate some particular grammatical mechanisms underlying person-based ergative splits. I say 'mechanisms', in the plural, as one of my chief conclusions is that both morphological and syntactic mechanisms are at work in producing patterns like (1)/(2) cross-linguistically. The core argument comes from a comparison of Nez Perce, a language whose person split in ergativity has not been studied in depth before, with a diverse set of languages recently studied by Legate (2014) – Dyirbal, Udi, Kham, Siberian Yupik and Marathi. While these languages all show what seems initially to be the same type of split ergativity, clear differences emerge under modification and coordination. These differences are as predicted if the person split may arise either by morphological mechanisms or by syntactic ones. The implication is that the effects of the Silverstein hierarchy overall are distributed among multiple components of the grammar. This, I suggest, is in keeping with work on historical and functional aspects of hierarchy effects which locate the ultimate source of these effects external to the grammar itself.

[1] This is so modulo the series of 'reflexive' pronouns in these languages, which lack an ergative in all persons.

The paper is structured as follows. In the next section, I introduce the basic facts of ergativity and clausal syntax in Nez Perce. In section 3, I briefly review the range of existing proposals for the synchronic grammar of person-based split ergativity, grouping them into 'morphological' and 'syntactic' categories. I then present two arguments from Legate (2014) in favor of the morphological analysis as a cross-linguistic explanation for person-based split ergativity. In section 4, I present the behavior of Nez Perce on Legate's diagnostics, showing that it behaves unlike the group of languages she studies. The Nez Perce patterns are, however, to be expected on certain syntactic approaches to the person split. In section 5, I propose an explicit account of the syntax of the person split in Nez Perce, building on Bianchi (2006) and Merchant (2006)'s approach to person-sensitive syntax, Jelinek (1993), Nash (1997), Merchant (2006) and Wiltschko (2006)'s treatment of split ergativity, and Deal (2010a,b)'s treatment of ergative case. In section 6, I discuss implications for the nature of hierarchy effects, and conclude.

2 Ergativity in Nez Perce

Nez Perce is a Sahaptian language spoken in Idaho, Washington and Oregon, USA.[2] The language is highly endangered; recent estimates count no more than 30 native speakers, all above the age of 65 (Harold Crook, p.c.). The data in this paper come from fieldwork on the Nez Perce Reservation in Lapwai, Idaho. Data are presented in the practical orthography used by the language program of the Nez Perce Tribe. A table of correspondences to IPA is given in the appendix.

Nez Perce has a nominative-accusative system of verb agreement alongside a case system that varies between nominative-accusative (for 1st and 2nd person) and tripartite ergative (for 3rd person).[3] The basic pattern is exemplified for 1st person in (3) and 3rd person in (4). As (4) shows,

[2] The Sahaptian family includes Nez Perce along with Sahaptin languages spoken throughout the Columbia Plateau region. This uncontroversial family is commonly attributed to the much more tentatively established Penutian stock, following Sapir (1929); see Silverstein (1979) and DeLancey and Golla (1997) for critical discussion.

[3] The language also allows notionally transitive clauses in which both arguments are nominative. As discussed at length in Rude 1985, 1986, Deal 2010a, and especially Deal 2010b, pp. 188-423, this clause type arises when either the object is a weak indefinite or the subject binds the possessor of the object. This pattern holds regardless of the person of the subject, and so is set aside here.

intransitive subjects, transitive subjects, and transitive objects are all marked distinctly in the 3rd person.[4]

(3) a. ’Iin wáaqo’ kúu-∅-ye.
1SG.NOM already go-PERF-REM.PAST
I already went.

b. ’Iin ’e-kíwyek-∅-e sik’éem-ne.
1SG.NOM 3OBJ-feed-PERF-REM.PAST horse-ACC
I fed the horse.

c. Ciq’áamqal-m hi-ke’níp-∅-e ’íin-e.
dog-ERG 3SUBJ-bite-PERF-REM.PAST 1SG-ACC
The dog bit me.

(4) a. ’Áayat wáaqo’ hi-kúu-∅-ye.
woman.NOM already 3SUBJ-go-PERF-REM.PAST
The woman already went.

b. ’Áayato-nm pée-kiwyek-∅-e sik’éem-ne.
woman-ERG 3/3-feed-PERF-REM.PAST horse-ACC
The woman fed the horse.

c. Ciq’áamqal-m pée-ke’np-∅-e ’áayato-na.
dog-ERG 3/3-bite-PERF-REM.PAST woman-ACC
The dog bit the woman.

The verbal agreement system distinguishes 3rd from non-3rd person and plural from non-plural number. Non-plural number and 1st and 2nd person – henceforth, ‘local person’ – are not marked overtly. The overt markers consist of the five prefixes listed in (5), along with the portmanteau suffixes listed in the rightmost column of (6).

[4] The following abbreviations are used in Nez Perce glosses: 3/3 3rd person subject and 3rd person object portmanteau agreement, 3OBJ 3rd person object agreement, 3SUBJ 3rd person subject agreement, ACC accusative (glossed ‘objective’ in Aoki 1970, 1994, Crook 1999 and Deal 2010a,b, and ‘DO’ in Rude 1985, 1986), APPL applicative, C complementizer, CISLOC cislocative, ERG ergative, HAB habitual, IMPERF imperfective, INCL inclusive, NEG clausal negation, NOM nominative, O.PL plural object agreement, PL plural, PERF perfect/perfective, PRES present tense, PRO null pronoun, PRT particle, REC.PAST recent past tense, REM.PAST remote past tense, RP relative pronoun, SG singular, S.PL plural subject agreement.

(5) Agreement prefixes

hi-	3rd person subject
'e-	3rd person object
pee-	3rd person subject and 3rd person object
pe-	plural subject
nees-	plural object

(6) Portmanteau aspect/mood and agreement suffixes

	Basic form	Plural subject form
Imperfective	se/ce	siix/ciix
Habitual	teetu	tee'nix
Imperative	∅/y/n	tx/nitx

Plural subject agreement occurs only for animate subjects (Deal, 2013a). In the imperfective, habitual, and imperative, the plurality of an animate subject is marked as part of a portmanteau suffix, as in (6). The basic form of the aspect/mood suffix is used if the subject is singular and/or inanimate. In other aspect/mood categories, the plurality of an animate subject is marked by the plural subject prefix *pe*; this prefix is simply absent for singular and/or inanimate subjects. Full paradigms for verbal agreement are given in Deal (To appear).

Case is marked by suffixes which attach to nouns and, optionally, to numerals, demonstratives, and attributive adjectives. The table in (7) lists the core structural cases and their common allomorphs. Note that ergative and genitive are marked the same way, as is often true in ergative languages.[5]

(7) Major cases and their common allomorphs

Nominative	∅
Ergative/Genitive	-m, after derivational suffixes -nm, after vowels -im, after nasals -nim, otherwise
Accusative	-e, after n -ne/na (depending on vowel harmony), otherwise

With the exception of relative clauses, noun modifiers are reliably prenominal.[6] Case-marking on

[5] Further allomorphs of the various cases are discussed by Aoki (1970, 72-75) and Rude (1985, 82-96). Note that further allomorphs are not reported to distinguish ergative and genitive.

[6] Nez Perce relative clauses are not nominalized, and they do not show case marking on the relative clause itself. See Deal (2014) for discussion.

prenominal modifiers plays an important role in section 4; it is exemplified in (8)-(10).

(8) Kuckúc-nim ’áatamooc-nim himeq’íis-ne ’áatamooc-na páa-tamya-n-a.
small-ERG car-ERG big-ACC car-ACC 3/3-hit-PERF-REM.PAST
The small car hit the big car.

(9) Ki-nm pit’íin-im ’úuyit pée-x-n-e *pro*.
this-ERG girl-ERG first 3/3-see-PERF-REM.PAST PRO.3SG
This girl saw him first.

(10) *Pro* pée-’pewi-six-∅ náaqc-na miya’ás-na.
PRO.3PL 3/3-look.for-IMPERF.PL-PRES one-ACC child-ACC
They’re looking for one child.

Nominative, ergative, genitive, and accusative forms of personal pronouns are given in the tables in (11). Anticipating the conclusion of section 4, I leave the cells corresponding to ergative local pronouns blank.

(11) Case-marked forms of personal pronouns

a. Singular

	Nominative	Ergative	Genitive	Accusative
1sg	’iin		’íinim	’íine
2sg	’iim		’imím	’imené
3sg	’ipí	’ipním	’ipním	’ipné

b. Plural

	Nominative	Ergative	Genitive	Accusative
1pl	nuun		núunim	núune
2pl	’imé		’iméem	’imuuné
3pl	’imé	’iméem	’iméem	’imuuné

Note that the plural 2nd and 3rd person pronouns are identical in all contexts except as a transitive subject. In this environment, the 2nd person subject is nominative (*’imé*), whereas the 3rd person subject is ergative (*’iméem*).

(12) ’Imée-m hi-pe-cewcew-núu-m-∅-e *pro*.
3PL-ERG 3SUBJ-S.PL-call-APPL-CISLOC-PERF-REM.PAST PRO.1SG
They called me.

(13) ’Imé ’eetx pe-cewcew-núu-m-∅-e *pro*.
2PL.NOM 2PL.CLITIC S.PL-call-APPL-CISLOC-PERF-REM.PAST PRO.1SG
You (pl) called me.

These examples can be diagnosed as unambiguously transitive thanks to the presence of the applicative verbal suffix.[7]

At the clausal level, the order of major constituents is quite flexible, and pronominal subjects and objects of all persons are often omitted.[8] Omitted arguments are indicated by *pro* in Nez Perce examples, with the gloss line reflecting the person and number features conveyed by the speaker's translation; for ease of reading, I follow a convention of placing *pro*s in SVO order. The person and number of a missing argument are frequently recoverable from the verbal inflection.

(14) *Pro* pée-p-∅-e *pro*.
PRO.3SG 3/3-eat-PERF-REM.PAST PRO.3SG
He ate it.

Recall, however, that verbal inflection includes no special markers for 1st or 2nd person. Clauses containing a 1st or 2nd person argument are typically disambiguated by the use of full pronouns or by the presence of a clitic from the table in (15).[9]

(15) Second person clitics
’ee 2nd person singular
’eetx 2nd person plural
kiye 1st person plural inclusive (1st person + 2nd person)

These clitics most commonly appear in immediate preverbal position, and may double the full pronouns.

(16) ’Iim ’ee wee-s wepcúux.
2SG.NOM 2SG.CLITIC be-PRES smart
You (sg) are smart.

[7] On applicatives and the hallmarks of formal transitivity in Nez Perce, see Rude (1986).
[8] Information-structural consequences of word order variation are discussed by Rude (1992).
[9] Sentences with only local arguments are additionally disambiguated by cislocative inflection, which is used nearly categorically when the subject is 2nd person and the object is 1st person.

(17) *Pro* 'ime-né 'ee 'iyóoxoo-sa-∅.
PRO.1SG 2SG-ACC 2SG.CLITIC wait.for-IMPERF-PRES
I'm waiting for you (sg).

(18) *Pro* 'imuu-né 'eetx tiwix-nu'.
PRO.1SG 2PL-ACC 2PL.CLITIC follow-FUT
I will follow you (pl).

Unlike the full pronouns, the clitics may not be coordinated or host focus suffixes such as *-cim* 'only' or *-k'u* 'also'. They also differ from full pronouns in that they do not mark case distinctions. They may occur with subjects, as in (13) and (16), as well as objects, as in (17) and (18). No parallel set of clitics exists for 3rd or (non-inclusive-plural) 1st person arguments.

The ergative character of Nez Perce is confined to its case system. The language does not show syntactic ergativity in A' extraction.[10] Verbal morphology remains constant across declaratives, *wh*-questions and relative clauses; there is no special clause type for extraction of an ergative.

(19) Laqáas-nim pee-p-téetu-∅ pe'túu-ne.
mouse-ERG 3/3-eat-HAB-PRES various.things-ACC
A mouse eats various things.

(20) 'Itúu-nm pee-p-téetu-∅ ɬepɬép-ne?
what-ERG 3/3-eat-HAB-PRES butterfly-ACC
What eats butterflies?

(21) 'Ituu-ne ɬepɬép-nim pee-p-téetu-∅?
what-ACC butterfly-ERG 3/3-eat-HAB-PRES
What do butterflies eat?

The language also does not show an ergative split conditioned by clausal properties such as tense or aspect. Examples (22) show that 3rd person transitive subjects are ergative-marked across the language's three tenses: present, recent past and remote past. These examples also show that ergative marking appears in the imperfective aspect.

[10]Cross-linguistically, this type of syntactic ergativity is the most widely distributed type; ergativity in control, for instance, appears only in languages with syntactically ergative A' patterns, such as Dyirbal (Dixon, 1994) and Seediq (Aldridge, 2004). See Deal (2015) for discussion of this implication.

(22) a. ’Áayato-nm picpíc-ne pée-kiwyek-se-∅ cúu’yem.
woman-ERG cat-ACC 3/3-feed-IMPERF-PRES fish.NOM
The woman is feeding the cat fish.[11]

b. Naaqc ’áayato-nm pée-kiwyek-sa-qa picpíc-ne ke yoxˆ k’óomaynin’
one woman-ERG 3/3-feed-IMPERF-REC.PAST cat-ACC C RP.NOM sick
hi-wa-qá watíisx.
3SUBJ-be-REC.PAST yesterday
A woman was feeding a cat that was sick yesterday.

c. Ha-hácwal-m pée-kiwyek-se-ne ciq’áamqal-na.
PL-boy-ERG 3/3-feed-IMPERF-REM.PAST dog-ACC
The boys fed the dog.

Examples (23) show that 3rd person transitive subjects remain ergative in other aspectual categories, such as perfective and habitual.

(23) a. Mátt-nim hi-nees-cewcewí-n-e *pro*.
Matt-ERG 3SUBJ-O.PL-call-PERF-REM.PAST PRO.3PL
Matt called them.

b. Ángel-nim hi-nees-cewcew-téetu-∅ núun-e.
Angel-ERG 3SUBJ-O.PL-call-HAB-PRES 1PL-ACC
Angel usually calls us.

Likewise, negation and clausal embedding have no effect on the appearance of the ergative case. The language’s ergative split is strictly on the basis of person.

With this background, we turn in the next section to proposed explanations for person-based split ergativity. We return to the Nez Perce facts in section 4.

3 Two approaches to person-based split ergativity

Theoretical approaches to person-based split ergativity may be divided into two groups depending on the type of explanatory mechanism posited. On the morphological approach, the relevant mechanisms are active at the syntax-phonology interface, regulating the realization or exponence of case features assigned in syntax. On the syntactic approach, the relevant mechanisms are active

[11] Example (22a) demonstrates the standard case pattern in ditransitives: ergative subject, accusative goal, and nominative theme. This pattern is discussed by Deal (2013b).

in the syntax itself. In this section I briefly introduce the two styles of analysis before presenting arguments from Legate (2014) in favor of the morphological approach.

The central insight of morphological approaches is that patterns like (1)/(2) constitute an instance of syncretism. Subjects of all persons are assigned an ergative case feature in ergative languages. Person splits result when, for local persons, nominative and ergative share a morphological form. Applied to Nez Perce, this leads to a view of the pronominal system as partially depicted in (24): ergative forms of local person pronouns exist, but are identical to nominative counterparts.

(24) Nez Perce singular personal pronouns

	Case assigned in syntax			
	Nominative	Ergative	Genitive	Accusative
1sg	’iin	’iin	’íinim	’íine
2sg	’iim	’iim	’imím	’imené
3sg	’ipí	’ipním	’ipním	’ipné

The partial syncretism between nominative and ergative has been attributed to a variety of sources:

(25) i. Ergative case is realized by a special zero allomorph on local person subjects, which happens to look identical to the nominative (Aldridge 2007).

ii. Markedness constraints prevent the realization of abstract ergative case on local person subjects (Woolford 2008).

iii. Abstract ergative case features are deleted by a morphological rule of Impoverishment applying to local person subjects (Keine and Müller 2008, Legate 2014).

iv. Abstract ergative features are realized overtly only when combined with 3rd person; in all other circumstances they receive a default zero realization (Deal 2010b).

The core of the syntactic analysis, by contrast, is that what you see is what you get: the absence of an ergative case form for 1st and 2nd person subjects is due to the failure of syntactic ergative

case assignment. It is not simply that ergative versions of the local pronouns are realized in a special way in languages with a person-based split; rather, in such languages, the relevant syntactic objects do not exist. A number of potential causes for their non-existence have been explored:

(26) i. Markedness constraints prevent assignment of [ERG] to local person subjects (Aissen 1999, Deo and Sharma 2006, de Hoop and Malchukov 2008, Malchukov 2008).

ii. The *v* which introduces local person subjects does not assign [ERG] (Carnie 2005, Alexiadou and Anagnostopoulou 2006).

iii. Local person features require licensing by a ParticipantP projection in the clause, which splits the clause into two case domains and prevents assignment of [ERG] (Coon and Preminger 2012).

iv. Local person pronouns are DPs, not NPs, and ergative case is only assigned to NPs (Kiparsky 2008, Richards 2008).

v. Local person subjects must occupy or agree with a position in the clausal spine in which [NOM] is active, whereas 3rd person subjects must occupy or agree with a position in which [ERG] is active (Jelinek 1993, Nash 1997, Merchant 2006, Wiltschko 2006).[12]

Legate (2014) discusses several key points where the syntactic and the morphological approaches differ in their predictions, two of which are of central interest here.[13] The first concerns modifiers of the subject. If subjects of all persons have the same syntax and the same case features, as the morphological approach proposes, they should show the same pattern of case on appositive modifiers. If the modifier of a 3rd person subject is marked with ergative, the modifier of a 1st or 2nd person subject should be marked with ergative as well. This follows on the morphological ap-

[12]This is somewhat of a simplification of Merchant's view, which posits that local person subjects transit through positions in which *both* [ERG] and [NOM] are assigned. [NOM] is realized at PF because it is the outermost case. By contrast, 3rd person subjects only occupy a position in which [ERG] is assigned.

[13]The third diagnostic, syntactic ergativity, is set aside here because Nez Perce is not syntactically ergative.

proach because the syncretic realization of ergative and nominative holds only for the local person pronouns themselves, *not* for other material that may modify them. On the syntactic approach, by contrast, the entire subject lacks an ergative feature when 1st or 2nd person.[14] Therefore, both the pronoun and its modifiers should lack ergative case.

Legate discusses four languages with person-based split ergativity where data is available on modification. In all of these languages – Dyirbal, Udi, Kham, and Maraṭhi – modifiers of local person subjects show ergative, just like modifiers of 3rd person subjects. This supports the morphological approach. The pattern is illustrated below with data from Maraṭhi. Examples (27)-(29), from Dhongde and Wali (2009), show the basic pattern of person-based split ergativity. This pattern holds in Maraṭhi only in the perfective, and so all Maraṭhi examples given here use this aspect.[15]

(27) Mi babu-la bolaw-l-ə.
I.NOM Babu-DAT call-PERF-NSG
I called Babu. (Dhongde and Wali, 2009, 183)

(28) Tu babu-la bolaw-l-ə-s.
I.NOM Babu-DAT call-PERF-NSG-2SG
You called Babu. (Dhongde and Wali, 2009, 183)

(29) Lili-ni babu-la bolaw-l-ə.
Lili-ERG Babu-DAT call-PERF-NSG
Lili called Babu. (Dhongde and Wali, 2009, 179)

Pronominal subjects in Maraṭhi may be modified by adjectives, in which case the adjective follows the pronoun and is case-marked. In the crucial examples, (30) and (31), we see that modifiers of local person subjects take the ergative case.[16]

[14]Exceptions are possible on Merchant (2006)'s view. See Merchant (2006, (32)), Legate (2014, 207) for discussion.

[15]Maraṭhi glosses follow the original sources, with one exception: Dhongde and Wali (2009) do not explicitly gloss nominative on local person subjects. The following additional abbreviations are used: DAT dative, NSG neuter singular, NPL neuter plural.

[16]See Deo and Sharma (2006, §4.1) for additional evidence of this fact from a slightly different modification construction in Maraṭhi.

(30) Mi bicharii-ne sagla kaam ke-la.
I.NOM poor-ERG all work do-PERF.3SG
Poor little me did all the work. (Legate, 2014, 195)

(31) Tu bicharii-ne sagla kaam ke-las.
you.NOM poor-ERG all work do-PERF.2SG
Poor little you did all the work. (Legate, 2014, 195)

This pattern provides evidence of a purely morphological basis for person-based split ergativity in Maraṭhi. Parallel facts, as noted above, hold in Dyirbal, Udi and Kham (Legate 2014, pp. 188, 191, 193). The results of this diagnostic are summarized in (32).

(32) Modifiers of local person transitive subject

Morphological approach prediction:	Ergative	✓
Syntactic approach prediction:	Nominative	
Maraṭhi, Dyirbal, Udi, Kham:	Ergative	

A second diagnostic discussed by Legate concerns coordination. The morphological approach predicts that it should be possible to coordinate local and non-local subjects without altering the case pattern for each individual conjunct. Thus a coordination like 'he and I', serving as transitive subject, should show ergative case on the 3rd person conjunct, but nominative case on the 1st person conjunct. The well-formedness of such coordinations follows because all transitive subjects are the same in structure and in abstract case features; they differ only in their morphological realization.

On the syntactic approach, predictions for coordination differ according to the precise mechanism implicated in the absence of [ERG] on local person subjects. For many syntactic approaches, the most straightforward expectation is that coordinations including local persons should lack all ergative case. This prediction may be derived in either of two ways. First, on some theories, what matters is simply the overall person value of the subject (Aissen 1999, Carnie 2005, Alexiadou and Anagnostopoulou 2006, Deo and Sharma 2006). A coordination including a first person is first person plural, and otherwise, a coordination including a second person is second person plural. Thus any coordinated subject including a local person will act as a local person subject, resulting in the

absence of [ERG] (by whatever mechanism). Second, some theories impose a special requirement on local persons, in contrast to the absence of a requirement on 3rd persons; satisfaction of the requirement results in the absence of ergative case assignment (Coon and Preminger 2012). On this type of view, the presence of a local person coordinate inside the subject plausibly triggers the special requirement, engaging those clausal mechanisms which prevent ergative case assignment within the clause.

A sharply different prediction is made on syntactic approaches which contrast an NP category for 3rd person arguments with a DP category for local person arguments (Kiparsky 2008, Richards 2008). The most straightforward expectation from this approach is that coordinations of local and non-local person arguments are simply impossible, since the categories of the conjuncts do not match. Notably, this impossibility is predicted both for coordinations of transitive subjects and for coordinations serving as other types of arguments.

Finally, some syntactic approaches postulate separate loci of case assignment or agreement for local and non-local subjects (Jelinek 1993, Nash 1997, Merchant 2006, Wiltschko 2006), plausibly due to specific requirements imposed on both local and non-local person DPs. If these requirements hold only of entire subject DPs, but not coordinates thereof, the expectation is once again that coordinations including local persons should lack all ergative case. If, however, coordinates of subjects also must meet person-based requirements, then when a coordination like 'he and I' serves as subject, the two coordinates are subject to conflicting requirements: the 3rd person coordinate must enter into a relationship with a head assigning ergative, whereas the 1st person coordinate must enter into a relationship with a head assigning nominative. The result is a coordination whose coordinates do not match in abstract case. This, I assume, violates one aspect of the symmetry requirement on coordinations:

(33) Condition on Case in Coordinations (CCC)

In a DP coordination, the coordinates must match in abstract case features.

In consequence, we might expect coordinations of local and non-local subjects to be ungrammatical. By contrast to the NP/DP view, however, we do not expect the same to hold for coordinations

of non-subjects. For non-subjects, arguments of all persons receive the same case values, and no feature clash is expected in coordinations.

The overall set of predictions for coordinations is summarized in (34). Small roman numerals refer to versions of the syntactic view listed in (26); the prediction given for view (v) corresponds to the second possibility discussed just above.

(34) Predictions for coordinations of local and non-local persons as transitive subject

Morphological approach:	Grammatical. Ergative on non-local coordinates.
Syntactic approaches:	
i-ii. No ERG assignment to local arguments:	Grammatical. Nominative on all coordinates.
iii. Special licensing of local persons:	Grammatical. Nominative on all coordinates.
iv. NP vs. DP:	Ungrammatical. Non-subject counterpart also ungrammatical.
v. Distinct licensing heads:	Ungrammatical. Non-subject counterpart grammatical.

Legate (2014) discusses three languages with person-based split ergativity where data is available on coordination. In all of these languages – Udi, Maraṭhi, and Siberian Yupik – the predictions of the morphological approach are borne out: local person subjects may be coordinated with 3rd person subjects, and the coordinates retain the case pattern they show as simplex transitive subjects. This is exemplified in Maraṭhi in (35).

(35) Liki-ne ani mi keli kha-ll-i.
Liki-ERG and I.NOM banana.NPL.NOM eat-PERF-NPL
Liki and I ate bananas. (Legate, 2014, 194)

The grammaticality of the coordination, along with its case pattern, provides confirming evidence of the morphological source for the person split in Maraṭhi, and likewise in Udi (Legate 2014, 191) and Siberian Yupik (Legate 2014, 196) .

On the basis of the Maraṭhi data reviewed in this section, together with parallel facts from Dyirbal, Udi, Kham, and Siberian Yupik, Legate concludes that "split ergativity based on nominal

type is a morphological, rather than syntactic, phenomenon" (2014, 209). In the next section, I argue that this picture is incomplete.[17] Applied to Nez Perce, the same tests of modification and coordination reveal a syntactic basis for person-based split ergativity.

4 Person-based split ergativity in Nez Perce is syntactic

We begin with the modification diagnostic. Recall that in addition to marking case on the head noun, Nez Perce shows optional case concord between a noun and its prenominal modifiers. We see this concord in (36) in the 3rd person subject *yú'snim 'iceyéeyenm* 'poor Coyote'. Note that this sentence describes part of a traditional story in which Coyote is the main character, and so presumably *'iceyéeye* 'Coyote' here is used as a proper name.

(36) Yú's-nim 'iceyéeye-nm, wéet'u minma'í 'itúu-ne pée-p-se-∅.
poor-ERG coyote-ERG NEG PRT what-ACC 3/3-eat-IMPERF-PRES
Poor Coyote isn't eating anything.

On the morphological approach, we expect the case marking on the modifier *yú'snim* to remain constant when the subject is changed from a 3rd person name to a 1st or 2nd person pronoun. This, however, is not what we find. The switch to a local person subject brings the switch to a nominative form of the modifying adjective. The ergative form is no longer acceptable.

(37) Coyote says:

Yu'c / *yú's-nim *pro*, wéet'u q'o minma'í 'itúu-ne 'ee-pí-se-∅.
poor.NOM / *poor-ERG PRO.1SG NEG PRT PRT what-ACC 3OBJ-eat-IMPERF-PRES
Poor me isn't eating anything.

Consultant comment: "You can't use *yu'snim* [poor-ERG] for ME."

[17] This is a possibility acknowledged by Legate, who writes of her language sample that "languages are chosen based on availability of relevant data. Additional data on other languages may reveal the need to recognize a dichotomy between languages that pattern like those discussed here, in which the split has a morphological source, and languages that pattern differently, in which the split has a syntactic source. We would consider that an interesting result, but as of yet, we have found no such languages" (2014, fn. 9).

(38) Fox tells Coyote:

Yu'c / *yú's-nim *pro*, wéet'u q'o 'itúu-ne 'ee
poor.NOM / *poor-ERG PRO.2SG NEG PRT what-ACC 2SG.CLITIC
'ee-pí-se-∅.
3OBJ-eat-IMPERF-PRES
Poor you isn't eating anything.

This result, which is notably different from the Dyirbal, Udi, Kham, and Maraṭhi facts reviewed by Legate, is as expected on the syntactic approach.

A second type of modification test yields results consistent with only some morphological approaches, but all syntactic approaches. In addition to independent adjectives, Nez Perce allows pronouns to be modified by various suffixes. One of these is the suffix *ciwáatx̂* 'alone', which is special among the suffixes in that it attaches between the pronoun and its case marker. This is shown for the 1st person plural pronoun in (39).[18]

(39) *Pro* non-ciwáatx̂-na hi-nees-x̂ic'em-núu-∅-ye.
PRO.3SG 1PL-alone-ACC 3SUBJ-O.PL-get.angry-APPL-PERF-REM.PAST
He got mad at [us alone].

Modification by *ciwáatx̂* 'alone' is of special relevance for morphological approaches like Aldridge (2007), which posits a zero realization for the ergative feature in the context of a local person feature, and Deal (2010b), which posits an overt realization for the ergative feature only in the context of a 3rd person feature. If allomorphy may only be determined by linearly adjacent material, as Paster (2006) and Embick (2010) have argued, then the former view leads us to expect that the ordinary, nonzero exponent of ergative should reappear when *ciwáatx̂* 'alone' intervenes linearly between the pronoun and the case marker; the latter view leads us to expect that *ciwáatx̂* should interfere with ergative case marking on 3rd person pronouns. Neither expectation is borne out.

[18]This example shows a vowel harmony pattern which indicates that the pronoun and modifier form a single phonological word. Harmony in Nez Perce contrasts a dominant set of vowels, /a o/, with a recessive set, /e u/ (see i.a. Aoki 1966, Crook 1999, Deal and Wolf To appear). Recessive vowels change to the corresponding dominant vowel when a dominant vowel is present elsewhere in the word. In (39), the pronoun root is *nun*, which harmonizes to *non* when *ciwáatx̂* is added. The speakers consulted for this project do not have vowel harmony with full productivity, but they maintain it in certain forms.

Rather, third person pronouns modified by *ciwáatx̂* continue to bear overt ergative case as transitive subjects or (as in these examples) as appositive modifiers thereof, (40). In contrast, local person pronouns modified by *ciwáatx̂* continue to lack ergative case, (41).

(40) 'Ip-ciwáatx̂-nim 'iceyéeye-nm pée-p-se-∅ c'ixc'íx-ne.
3SG-alone-ERG coyote-ERG 3/3-eat-IMPERF-PRES grass-ACC
Coyote is eating the grass alone.

(41) 'In-ciwáatx̂ / *'in-ciwáatx̂-nim 'íin=k'u 'ee-p-téetu-∅ c'ixc'íx-ne.
1SG-alone.NOM / *1SG-alone-ERG 1SG=also 3OBJ-eat-HAB-PRES grass-ACC
I too usually eat the grass alone.

The facts about *ciwáatx̂* may be accounted for on morphological analyses like Keine and Müller (2008), Woolford (2008) and Legate (2014) if, for instance, the mechanisms that prevent spell-out of ergative on local person pronouns apply to all *words* containing such pronouns. They may also be accounted for straightforwardly on all versions of the syntactic analysis, where local person subjects and portions thereof are expected to systematically lack ergative.

Table (42) summarizes the predictions about modifiers and the findings for Nez Perce, by contrast to the findings in Maraṭhi, Dyirbal, Udi and Kham.

(42) Modifiers of local person transitive subject

Morphological approach prediction:	Ergative (at least when the modifier does not itself contain a person feature)	✓
Syntactic approach prediction:	Nominative	✓
Maraṭhi, Dyirbal, Udi, Kham:	Ergative	
Nez Perce:	Nominative	

This provides a first indication that person-based split ergativity is not a uniform phenomenon across languages.

Additional evidence in this direction comes from coordinations, which are formed in Nez Perce with the coordinators *kaa* 'and' or *'íitq'o* 'or'. Case-marking may appear on each coordinate individually, or just on the final coordinate.

(43) Kátie(-nim) kaa Hárold-nim pée-'pewi-six-∅ Múna-ne.
Katie(-ERG) and Harold-ERG 3/3-look.for-IMPERF.PL-PRES Muna-ACC
Katie and Harold are looking for Muna.

(44) *Pro* 'e-néec-'ipewi-se-∅ Ángel(-ne) kaa Tátlo-ne.
PRO.1SG 3OBJ-O.PL-look.for-IMPERF-PRES Angel(-ACC) and Tatlo-ACC
I'm looking for Angel and Tatlo.

Example (43) shows that coordinated transitive subjects pose no inherent grammatical problem in Nez Perce. Examples of this type are readily accepted as grammatical, and volunteered in translation from English. The same can be seen in a coordination of two local person pronouns as transitive subject, (45).

(45) 'Iim 'íitq'o 'iin kíye 'e-pe-múu-no'qa Ángel-ne
2SG.NOM or 1SG.NOM 1PL.INCL.CLITIC 3OBJ-S.PL-call-MODAL Angel-ACC
'íitq'o Tátlo-ne
or Tatlo-ACC
You or I should call Angel or Tatlo.

To express the coordination of local and non-local transitive subjects, however, speakers shift to an entirely different sentence type – a comitative, or so-called Plural Pronoun Construction (Schwarz 1988, Vassilieva and Larson 2005, i.a.). The non-local argument is encoded in a comitative phrase and the verb shows agreement with a plural subject. The presence of a plural argument is also marked in (47) by the 2nd person plural clitic *'eetx*. Notably, there is no coordinator, and presumably no coordination of local and non-local arguments.

(46) *Pro* 'e-'péwi-six-∅ Múna-ne Katie-níin.
PRO.1PL 3OBJ-look.for-IMPERF.PL-PRES Muna-ACC Katie-with
Katie and I are looking for Muna.

lit. We are looking for Muna with Katie.

(47) Katie-níin *pro* 'eetx 'e-pe-'páw-yo'qa Múna-ne.
Katie-with PRO.2PL 2PL.CLITIC 3OBJ-S.PL-look.for-MODAL Muna-ACC
You (sg) and Katie should look for Muna.

lit. You (pl) should look for Muna with Katie.

The Plural Pronoun Construction is equally available when all arguments are 3rd person (Rude, 1985, 101-103); this construction imposes no person restriction. Simple coordination of subject

DPs, however, does appear to impose a restriction. Generally, judgments on transitive sentences with local and non-local subject coordinates range from skepticism and a suggested correction to the Plural Pronoun Construction to outright rejection. Note that this holds across a range of case patterns: both conjuncts in the nominative, as in (48), ergative on the final conjunct, as in (49), and ergative on a non-final 3rd person coordinate, as in (50).

(48) * 'Iin kaa Ángel 'e-nées-tecukwe-cix-∅ *pro*.
1SG.NOM and Angel.NOM 3OBJ-O.PL-teach-IMPERF.PL-PRES PRO.3PL
I and Angel are teaching them.

(49) * 'Iin kaa Ángel-nim 'e-nées-tecukwe-cix-∅ *pro*.
1SG.NOM and Angel-ERG 3OBJ-O.PL-teach-IMPERF.PL-PRES PRO.3PL
I and Angel are teaching them.

(50) * Ángel-nim kaa 'iin 'e-nées-tecukwe-cix-∅ *pro*.
Angel-ERG and 1SG.NOM 3OBJ-O.PL-teach-IMPERF.PL-PRES PRO.3PL
Angel and I are teaching them.

The one systematic exception is instantiated by examples like (51): the first person pronoun appears in the final position, and ergative case is absent throughout the coordination. While not perfect, such examples are considerably better than (48)-(50).

(51) ? Ángel kaa 'iin 'e-nées-tecukwe-cix-∅ *pro*.
Angel.NOM and 1SG.NOM 3OBJ-O.PL-teach-IMPERF.PL-PRES PRO.3PL
Angel and I are teaching them.

It seems to me most plausible that examples of this type are a calque from English, a language in which all Nez Perce speakers are fluent. The primary fact in support of this conclusion is that coordinations like (51) are characterized as "beginner's speech" or "for students". Interestingly, judgments on coordinations of this type faithfully reproduce a fact of English coordinations oft attributed to prescriptive factors (see discussion in Grano 2006): in subject position, nominative 1st person pronouns must occur in final position. Compare (48), with 1st person first, to the minimally different (51), with 1st person last; only the latter is accepted. Just like in English, the order effect in Nez Perce holds only of subjects, and not of objects. In (52), it may be seen for a coordinated intransitive subject. Compare (53), where either order is acceptable for an object coordination.

(52) a. ’In-láwtiwaa kaa ’iin wi-síix-∅ ’éey’snin’.
1SG-friend.NOM and 1SG.NOM be-IMPERF.PL-PRES happy
My friend and I are happy.

b. * ’Iin kaa ’in-láwtiwaa wi-síix-∅ ’éey’snin’.
1SG.NOM and 1SG-friend.NOM be-IMPERF.PL-PRES happy
I and my friend are happy.

(53) a. Weet *pro* nées-hek-ce-m-∅ ’íin-e kaa
Y.N PRO.2SG O.PL-see-IMPERF-CISLOC-PRES 1SG-ACC and
’in-láwtiwaa-ma-na?
1SG-friend-PL-ACC
Do you see me and my friends?

b. Weet *pro* nées-hek-ce-m-∅ ’in-láwtiwaa-ma-na kaa
Y.N PRO.2SG O.PL-see-IMPERF-CISLOC-PRES 1SG-friend-PL-ACC and
’íin-e?
1SG-ACC
Do you see my friends and me?

I draw two conclusions from this overall set of judgments. First, the English pattern of 1st person last in subject coordinations – a restriction found to hold almost categorically of nominative pronouns in acceptability and corpus studies by Grano (2006) – has been adopted into Nez Perce, at least by the speakers consulted. The pattern is independent of ergative case, as it applies both to transitive subjects and to intransitive ones. Second, the structure of English subject coordinations has been borrowed into Nez Perce as the “beginner’s speech” construction (51). The native pattern seems to be that local and non-local person transitive subjects cannot be coordinated.

From this perspective, the most relevant judgments on coordinated local and non-local persons as the transitive subject are (48)-(50). These judgments make for a clear contrast with (43), where local and non-local persons are not present in the same coordination. Also to be contrasted with these examples are sentences where the coordination serves as an object. Here, as we saw in part in (53), coordinations of local and non-local persons show no special behavior: they are well-formed, and allow case on both conjuncts or just the final conjunct.

(54) Jím-nim hi-náac-’yax̂-n-a ’íin(-e) kaa Mátt-na cepéeletp’et-pe.
Jim-ERG 3SUBJ-O.PL-find-PERF-REM.PAST 1SG(-ACC) and Matt-ACC picture-LOC
Jim found me and Matt in the picture.

This data set overall indicates that some syntactic problem is encountered in the combination of three factors: coordination, transitive subject, and local plus non-local person. The response to this problem involves switching to the Plural Pronoun Construction, an alternative mode of expression that does not involve a coordinated subject.

These facts are different from the Marathi example (35) and, overall, unexpected on the morphological analysis. Unlike the modification facts, they are also unexpected on the majority of syntactic analyses. Among the syntactic proposals listed in (26), the ill-formedness of subject coordinations (48)-(50), together with the well-formedness of object coordination (54), is contrary to the predictions of all versions except (v). The overall results are summarized below.

(55) Coordination of local and non-local persons as transitive subject

Morphological approach predictions:	Grammatical. Ergative on non-local coordinates.
Syntactic approach predictions:	
i-ii. No ERG assignment to local arguments:	Grammatical. Nominative on all coordinates.
iii. Special licensing of local arguments:	Grammatical. Nominative on all coordinates.
iv. NP vs. DP:	Ungrammatical. Non-subject counterpart also ungrammatical.
v. Distinct licensing heads:	Ungrammatical. Non-subject counterpart grammatical.
Marathi, Udi, Siberian Yupik:	Grammatical. Ergative on non-local coordinates.
Nez Perce:	Ungrammatical. Non-subject counterpart grammatical.

These results confirm the need to recognize two sources for person-based split ergativity, one syntactic and one morphological. Beyond this, they reveal the need to handle the syntactic variety of person split in a way that involves distinct requirements holding of local and non-local persons. The conflict among these requirements plays the lead role in ruling out coordinations of local and non-local persons as transitive subject in Nez Perce.

5 The syntax of the person split

The results of the coordination and modification diagnostics lead to two core conclusions about the syntax of person in Nez Perce. First, and most fundamentally, local and non-local person subjects differ not just in their morphology, but in their syntax. Unlike 3rd persons, local person subjects are not assigned an [ERG] feature in syntax, regardless of transitivity. This explains why ergative case is never present on modifiers of local person subjects. Second, distinct grammatical requirements are imposed both for local persons and for 3rd persons, and these requirements extend to the coordinates of a subject coordination. The conflict among these requirements explains why coordinations of local and non-local arguments are not acceptable as transitive subjects. Such coordinations are acceptable as objects, however, which suggests that the requirements in question should be stated in terms related to case. This section sketches a syntactic analysis incorporating these conclusions.

I begin with the observation that a variety of languages, both ergative and non-ergative, provide evidence for dedicated person-related functional projections in the inflectional domain of the clause. In some instances the evidence involves movement or cliticization to these projections. This is the case in some Northern Italian dialects, for example, where local person subject clitics occur higher than negation, whereas 3rd person subject clitics occur below negation (Poletto, 2000). The same goes for local person pronouns versus 3rd person pronouns in Hebrew sentences with the negator *'eyn* (Shlonsky, 2000); Shlonsky explicitly argues that both positions are within the inflectional domain. In other instances the evidence comes from a split between two distinct loci for agreement, one for local person and one for non-local person. This is so, for instance, in Euchee, an isolate spoken in Oklahoma (Linn and Rosen 2003), in Athabaskan languages such as Slave (Rice 2000), and in Salish languages such as Lummi (Jelinek 1993) and Halkomelem (Wiltschko 2006). Finally, in some Romance varieties, the choice of auxiliaries is sensitive to the person of the subject (Kayne 1993, D'Alessandro and Roberts 2010). This pattern, too, may be explained by reference to person-sensitive functional projections (Coon and Preminger 2012).

Effects of this type lead Bianchi (2006) and Merchant (2006) to propose specialized functional

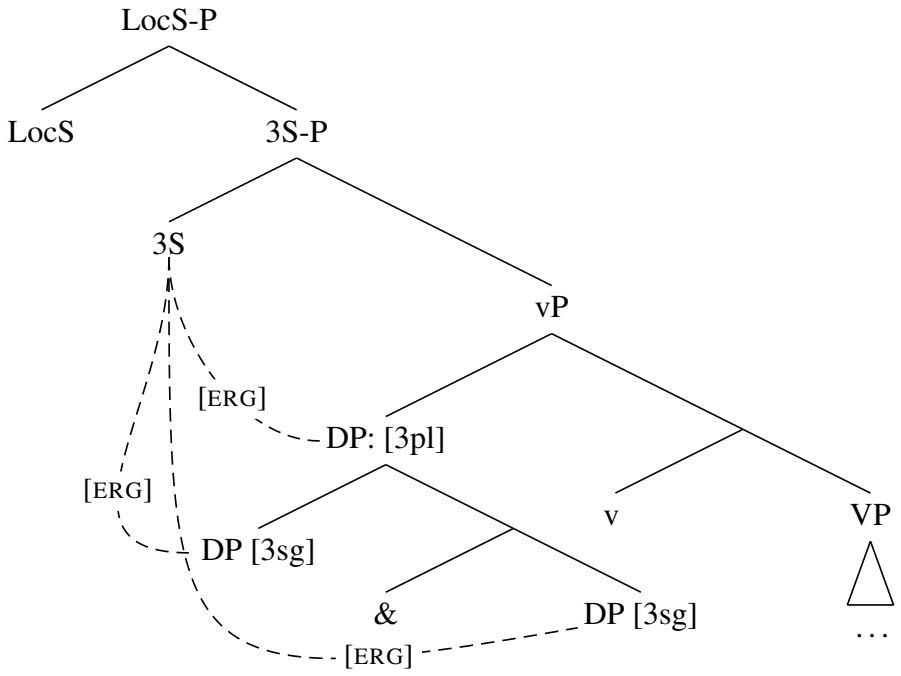
heads in the inflectional domain associated with local or non-local person features. All DPs bearing a person feature must interact with a head of this class; a separate series of heads interacts with subjects and with objects.[19] Adapting Bianchi's terminology slightly, I refer to the subject-related heads as LocS, for local person subjects, and 3S, for 3rd person subjects. A central idea in this domain is that person-based height differences among arguments, as we see in Northern Italian dialects, Hebrew, and Salish, arise because LocS-P is higher than 3S-P.

Person-sensitive phrase structure in the inflectional domain paves the way for an analysis of person-based split ergativity in the general tradition of those developed by Jelinek (1993), Nash (1997), Merchant (2006), and Wiltschko (2006). All subject arguments must agree with the appropriate subject-related projection; so too must coordinates within coordinated subjects. The syntactic type of case split arises when the heads involved are distinct in their case specifications. Deal (2010a,b, 2015) argues that ergative behaves as a structural case in Nez Perce, rather than as an inherent case assigned by *v* to its specifier. I propose therefore that [ERG] is assigned by 3S.[20] LocS assigns only [NOM]. In a coordinated subject containing two 3rd person coordinates, each must agree with 3S, and therefore each receives an [ERG] feature. So, too, does the overall containing DP.

[19]For Bianchi, the presence of separate person-linked heads for subject and for object is a parametric choice correlated with the presence of subject agreement. Since Nez Perce has subject agreement, it is expected to have separate subject and object person agreement heads. Additionally, for Bianchi, the projection of a single head for local persons holds as one of two parametric option instantiated in Italian idiolects; alternatively, specific heads may be projected for 1st and 2nd person. This latter option corresponds to the proposal by Merchant.

[20]Further elaboration is necessary to predict the transitivity condition on ergative assignment. Deal (2010a,b) accounts for this condition by treating ergative as arising when *both* an inflectional head and *v* agree with a particular DP. This idea can be represented schematically by thinking of the syntactic ergative feature as decomposed into two more fundamental syntactic features $[\alpha, \beta]$, one assigned by transitive *v* and one assigned by 3S. On this approach, the [ERG] feature in the text should be understood as representing only half of the syntactic ingredients to ergative case, viz. that half contributed by 3S. The other half is contributed to all subjects (and coordinates thereof) by *v*. Local persons receive only the features of *v*, not the features of 3S, when they serve as transitive subjects. Thus they do not have ergative case, understood as *both* the α and β features.

(56)



The result is a coordination whose coordinates match in abstract case. This conforms to the CCC, repeated below.

(57) Condition on Case in Coordinations (CCC)

In a DP coordination, the coordinates must match in abstract case features.

This condition holds in the narrow syntax. At PF, the case feature of each coordinate may be realized with a case suffix, resulting in examples like (58a). Alternatively, the case feature of the entire coordination may be realized, resulting in examples like (58b).

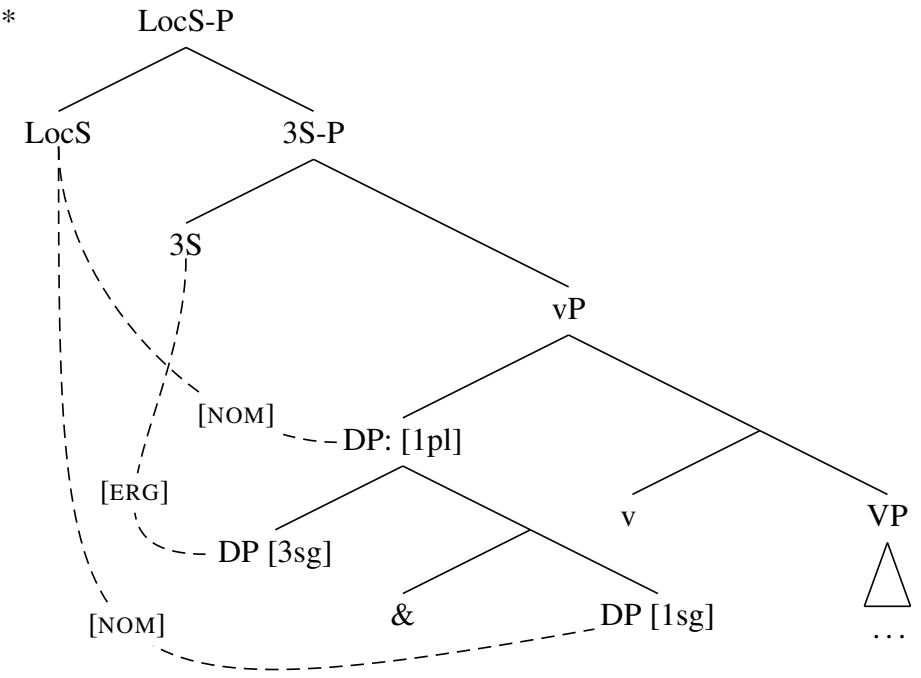
(58) a. Katie-nim kaa Harold-nim pee-'pewi-six-∅ Muna-ne.
Katie-ERG and Harold-ERG 3/3-look.for-IMPERF.PL-PRES Muna-ACC
Katie and Harold are looking for Muna.

b. Katie kaa Harold-nim pee-'pewi-six-∅ Muna-ne.
Katie and Harold-ERG 3/3-look.for-IMPERF.PL-PRES Muna-ACC
Katie and Harold are looking for Muna.

A parallel syntactic situation obtains when local person arguments are coordinated. The overall coordination and both individual coordinates agree with LocS, receiving [NOM]. The result conforms to the CCC, and is well-formed.

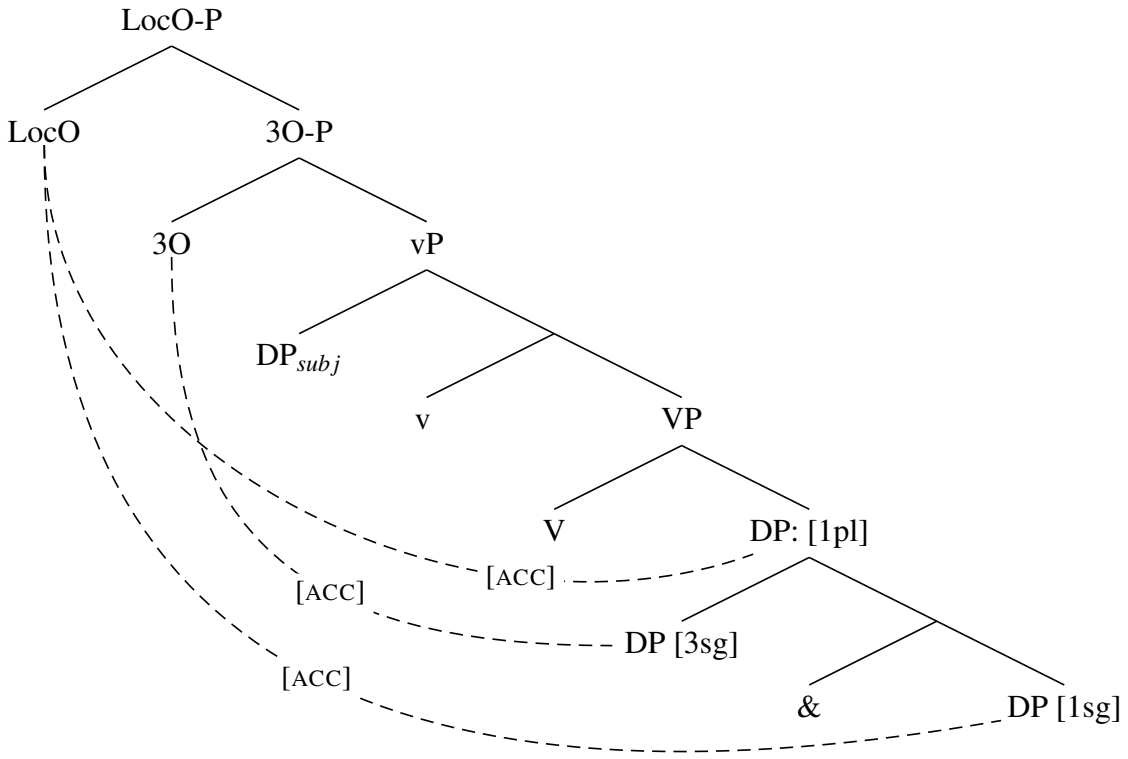
The situation is different when local and non-local persons are coordinated. The coordinates must enter relationships with heads assigning distinct cases, and the result, (59), therefore violates the CCC.

(59) *



This result should be contrasted with the case of a coordination in object position. Here, local and non-local coordinates enter into relationships with distinct heads, but these heads assign the same case (accusative). No violation of the CCC is thus incurred. Following Bianchi (2006), I show the object-related heads LocO and 3O as located above the vP level.

(60)



The well-formedness of such coordinations shows that coordinates may in principle agree with separate person licensing heads. This has the potential to produce ungrammaticality only when the person heads in question assign separate cases.

This analysis points up several dimensions which may be subject to crosslinguistic variation. First is the possibility of phrase-structural variation, as emphasized by Bianchi (2006); languages may differ in the extent to which they project articulated person-sensitive functional categories. A language lacking such projections presumably would not have the syntactic type of person-based ergative split, though it may still have the morphological type of split ergativity. Second is the possibility of variation in the cases assigned by person-sensitive heads. In various of the languages for which such heads have been posited, case is on a strict nominative-accusative basis. This suggests that 3S may assign [NOM] in some languages and [ERG] in others. If the same goes for LocS, then an ergative language with no person-based split, or a split of the purely morphological type, might differ from Nez Perce not in its hierarchical structure, but in the cases assigned by elements therein: both 3S and LocS assign [ERG]. Evidence for such a language could come from person-sensitive word order, placement of agreement morphology, or auxiliary selection, coupled

with the absence of person-based split ergativity or coordination/modification data suggesting a morphological basis for such a split.

6 Conclusions

Close comparative studies of ergative languages have shown repeatedly over the last two decades that ergativity is not a unified phenomenon.[21] A similar conclusion has been drawn in comparative studies of differential argument marking.[22] The findings of this paper contribute to a picture of the diversity lurking behind preliminary diagnoses such as 'split ergativity'. What is *prima facie* the same type of split ergativity may arise by morphological means in some languages but by syntactic means in others.

This conclusion raises a serious question concerning the status of hierarchy effects in grammar. Why should the same distribution of ergative and nominative arise by different mechanisms in different languages? Why should some languages do by morphological means the exact same thing that other languages do with person-sensitive distribution of abstract features? A deeper fact must be at stake on the relative markedness of the various person features, outside of the particular vocabulary of any one grammatical module. It therefore seems to me quite reasonable to conclude that hierarchy effects ultimately must arise external to the grammar itself, from the organization of human cognition and communication – a conclusion in line with various approaches that locate the origin of these effects extra-grammatically (i.a. Silverstein 1976, Dixon 1979, DeLancey 1981, Newmeyer 2002, Haspelmath 2008). Beyond diversity in the status of patterns like person-based split ergativity, the extra-grammatical origin of hierarchy effects has the potential to explain why hierarchy effects come into grammar to such a variety of degrees. Languages may fail to encode hierarchy effects in case-marking, or in various instances, show patterns directly contrary to the hierarchy (Filimonova 2005, Bickel and Witzlack-Makarevich 2008, Legate 2014). This is in addition to the fact that when languages do show hierarchy effects, multiple distinct types

[21] See Johns (2000), Legate (2008), Deal (2015) and references therein.

[22] See Legate (2006) on differences between systems of object marking, and de Hoop and Malchukov (2008), Malchukov (2008) on differences between object marking and subject marking.

of mechanisms may be involved. All this is not to be expected if hierarchy effects emerge from universals hard-wired in a unified way into the basic structure of grammatical systems.

I note in closing that this approach to the status of hierarchies echoes Chomsky (2005)'s view of language design as arising from the confluence of an extremely simple UG component with a range of Language-independent, 'third factor' effects of general human cognition. From this point of view, the study of hierarchy effects and their variation belongs not to the study of UG proper, but to the investigation of how narrow UG principles interact with broader mechanisms to produce grammatical diversity.

Appendix: Nez Perce orthographic conventions

The orthographic conventions in this paper follow IPA usage with a small number of exceptions. Long vowels are indicated with digraphs, e.g. [aa]. Main stress is indicated with an acute accent. Glottalization is indicated with an apostrophe. In addition:

(61) Differences between practical orthography and IPA

Orthography	IPA
e	æ
y	j
x̂	χ
’	ʔ
c	ts

A thorough guide to the various orthographic systems used for Nez Perce since the missionary period may be found in Crook (1999, 35-47).

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