Raising to ergative: remarks on applicatives of unaccusatives

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Applicatives of unaccusatives provide a crucial test case for the inherent case view of ergativity. If ergative is assigned only to external arguments, in their theta-positions, there can be no "raising to ergative" in applicative unaccusatives; an internal argument subject can never receive ergative case. In this paper I present evidence from Nez Perce (Sahaptian) that this prediction is false. In Nez Perce applicative unaccusatives, the theme argument raises over the applicative argument and is accordingly marked with the ergative case. Nez Perce thus demonstrates raising to ergative. Departing from Baker's (2014) conclusions for similar phenomena in Shipibo (Panoan), I argue that apparently nonlocal movement of the theme in the raising-to-ergative pattern involves not a covert adpositional structure, but rather a response to independently motivated constraints on antilocal movement and remnant movement.

1 Introduction

The inherent case view of ergativity holds that ergative case is assigned to an external argument in its θ -position by the v or Voice head that introduces it. A central prediction is therefore that ergative may only be assigned to external arguments – a prediction that Marantz (1991) had dubbed the *Ergative Case Generalization*:

(1) *Ergative Case Generalization*: Even when ergative case may go on the subject of an intransitive clause, ergative case will not appear on a derived subject. (Marantz, 1991:236)

As Legate (2012) notes:

The reference [by Marantz] to the subject of an intransitive clause is to circumvent the confound of the transitivity restriction: in general, transitive verbs have a thematic subject that becomes the surface subject, making it impossible to test whether a derived subject could bear ergative case. An additional way around the confound would be a two-argument verb in which both arguments are internal, for example, the passive of a double object verb, or *the applicative of a unaccusative verb*. If the Ergative Case Generalization holds, the subject of such verbs would not bear ergative case, despite the presence of two DP arguments. (Legate 2012, 183; emphasis added)

In this paper I argue, building on work by Baker (2014, 2015), that the Ergative Case Generalization does not hold, and that applicatives of unaccusatives provide crucial evidence against it. Focusing on the applicative unaccusatives of Nez Perce (Sahaptian), I demonstrate that the theme

¹ See Woolford (1997, 2006), Aldridge (2008), Legate (2008), and references in Woolford (2006) and Deal (2015a, 2016c). Hereafter, I refer to the head that introduces external arguments as *v*.

argument raises over the applicative argument and is marked with the ergative case. This "raising to ergative" pattern shows that ergative case cannot be restricted to external arguments, and thus that the inherent case view cannot be the (only) proper analysis of ergativity.²

The new evidence from Nez Perce replicates and expands on Baker's argument from applicative unaccusatives in Shipibo (Panoan; Peru). Shipibo shows a canonical ergative-absolutive case alignment; all intransitive subjects bear absolutive case. Contrary to the Ergative Case Generalization, however, applicatives of unaccusatives in Shipibo feature ergative case on the theme argument – a derived (transitive) subject. Compare the applicative unaccusative in (2a), where the subject is ergative, to the basic unaccusative in (2b), where the subject is absolutive.³

- (2) a. Bimi-n-ra Rosa joshin-xon-ke. fruit-ERG-EV Rosa.ABS ripen-APPL-COMPL 'The fruit ripened for Rosa.' (Baker, 2014, 346)
 - b. Kokoti-ra joshin-ke.fruit.ABS-EV ripen-COMPL'The fruit ripened.' (Baker, 2014, 345)

On the basis of the Shipibo facts, Baker (2014) motivates a "configurational" analysis of case assignment: ergative is a dependent case in Shipibo, rather than an inherent one.⁴ Baker and Bobaljik (2017) go one step further, arguing that the inherent case view should be abandoned in favor of the dependent case view not just for Shipibo, but for ergativity altogether.

The Nez Perce facts introduced here cast light on two types of questions raised by this argument. First, what is the cross-linguistic distribution of raising to ergative in applicative unaccusatives? If Baker and Bobaljik (2017) are right that ergative is never inherent, then raising to ergative should be possible across the full range of languages with ergative case systems, notwithstanding the variety of ways in which this class is internally diverse. On the other hand, if Rezac et al. (2014) and Coon (2016, 2017b) are right to suggest that ergative languages can be divided into an inherent-ergative class and a non-inherent-ergative class, we might expect to find correlations between raising-to-ergative in applicative unaccusatives and other distinctive characteristics of the two types of ergativity. Nez Perce proves useful in probing for correlations of this type, as it is unrelated to its fellow raising-to-ergative language Shipibo, and the two languages differ along several axes of variation in ergativity. Nez Perce, for instance, has a three-way ergative case system (ergative/nominative/accusative) whereas Shipibo has an ergative-absolutive case system (Rude 1985; Valenzuela 2003); Nez Perce has a syntactically-based person split whereas Shipibo has no person split at all (Deal 2016b; Valenzuela 2003); Nez Perce has agreement with both subjects and objects in person and number whereas Shipibo has agreement only in number and only with subjects (Deal 2015c; Valenzuela 2003, 2010). Both languages, however, show ergative case

² Applicative unaccusatives therefore complement the evidence for raising to ergative in Basque infinitivals (Rezac, Albizu, and Etxepare, 2014) and small clauses (Artiagoitia, 2001).

³ The case difference here is not due to the lexical choice of word for 'fruit': see Valenzuela (2003, 322) on the absence of noun-based case splits in Shipibo, along with Loriot et al. (1993, 118).

⁴ On dependent case approaches to ergative, see Yip, Maling, and Jackendoff (1987), Marantz (1991), Baker (2014, 2015), Baker and Bobaljik (2017).

⁵ An additional likely instance of the raising to ergative pattern occurs in applicative unaccusatives

on the theme in applicative unaccusatives. In Nez Perce, subjects of simple unaccusative clauses are nominative, (3). Applicative unaccusatives, in contrast, show ergative marking on the theme subject in Nez Perce, (4), just as in Shipibo.

- (3) Ha-'aayat hi-pa-pay-no'-kom.
 PL-woman.NOM 3SUBJ-S.PL-come-FUT-CIS
 'The women will come.'
- (4) Ha-'aayat-om nuun-e hi-pa-naas-pay-noo-yo'-kom. PL-woman-ERG 1PL-ACC 3SUBJ-S.PL-O.PL-come-APPL-FUT-CIS 'The women will come to us.'

If there is a split between inherent-ergative and non-inherent-ergative languages, then, all differences between Nez Perce and Shipibo must represent diversity internal to the non-inherent class.

Second, what is the mechanism by which raising to ergative takes place in applicative unaccusatives? In particular, how does raising of the theme over the applicative argument avoid a violation of relative locality? Baker (2014) advocates a solution involving a covert adpositional structure. The Shipibo applicative argument, he proposes, is actually a PP, not a DP. The applicative argument remains in situ because the PP cannot raise to an A-position and the DP subconstituent cannot be extracted from within PP. The theme, on the other hand, is able to move to an A-position above the applicative argument because the latter, as a PP, does not constitute an intervener for A-movement. This proposal for the structure of (2a) is shown in (5).

(5)
$$[_{TP} \text{ fruit.ERG}_i \text{ T } [_{ApplP} \text{ } [_{PP} \text{ P Rosa.ABS }] \text{ Appl } [_{VP} \text{ ripen } t_i \text{ }]]]]$$

This structure leads us to expect that applicative arguments should behave systematically different from other objects, and similar to PPs, in respects independent of raising-to-ergative. In Shipibo, for instance, PPs show overt adpositional structure, constitute opaque domains for case-assignment, and behave unlike objects for switch-reference. Applicative arguments, however, show none of these PP behaviors (ibid., fn 23). They lack any visible adpositional marking and behave like ordinary DP objects for case-assignment and switch-reference. Such facts raise the suspicion that applicative arguments are really just DPs after all – in which case a different explanation will have to be found for the locality behavior of raising-to-ergative. The alternative I propose is based on a principle of antilocality that regulates movement between specifier positions (Bošković 2015, 2016, Erlewine 2016, Brillman and Hirsch To appear): the theme raises because the applicative argument is too close to the immediate landing site (Spec,v). In addition to the core locality facts

in Ixil Mayan (Imanishi, 2017), which presents further points of variation from both Nez Perce and Shipibo: it is a purely head-marking ergative-absolutive language with split ergativity based only on aspect. No unaccusativity diagnostic has been explicitly proposed for Ixil, however. (Unaccusativity tests elsewhere in Mayan are discussed in Imanishi (2014). For an unaccusativity test in Shipibo, see Baker (2014, 370); for Nez Perce, see §2.2 below. Tests are needed due to variability in the unaccusativity status of translation equivalents across languages, on which see Rosen (1984) and Levin and Rappaport-Hovav (1995). I take no stand here on the nature of this variability.)

⁶ For readability, I have modified Baker's original proposal to show head-initiality.

of raising to ergative, this proposal combines with Müller's (1996) constraint on remnant movement to provide a natural account of possessor raising from applicative arguments in Nez Perce – a pattern which proves challenging for the covert-PP proposal.

The paper is structured as follows. In the next section, I lay out the basics of case and agreement, unaccusativity, and applicative constructions in Nez Perce. In section 3, I argue that the theme argument indeed raises above the applicative argument in applicative unaccusatives, and that Nez Perce exemplifies raising to ergative (*contra* the Ergative Case Generalization). Section 4 is devoted to the theoretical questions raised by this movement: why does the theme argument move, and why can't the applicative argument move instead? I advance an antilocality-based solution, drawing on evidence from possessor raising (Deal, 2013). In section 5, I conclude by considering the consequences of raising to ergative for the analysis of ergative case.

2 Ergativity, unaccusativity, and applicatives in Nez Perce

Nez Perce is a Sahaptian language spoken natively by no more than 30 individuals in Idaho, Washington, and Oregon, USA. Except where otherwise indicated, the data here 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 of Idaho. A table of correspondences to IPA is given in the appendix to Deal (2016b).

As demonstrated by Rude (1985, 1992), Crook (1999), and Deal (2010b), the language allows considerable word order freedom at the clausal level, and pronominal subjects, objects, and possessors of all persons are often omitted. Omitted arguments are indicated here 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 *pros* in SVO order.

2.1 Case and agreement

Nez Perce is well-known for its tripartite ergative case alignment: intransitive subjects, transitive subjects, and objects are all marked distinctly in the third person. Nominative is unmarked; accusative is marked by *ne* and allomorphs; and ergative is marked by *nim* and allomorphs. The case-marking system is described and analyzed by Rude (1985, 1986), Woolford (1997), Crook (1999), Carnie and Cash Cash (2006), and Deal (2010a,b, 2016b).

- (6) Angel hi-pnim-se.
 Angel.NOM 3SUBJ-sleep-IMPERF
 'Angel is sleeping.'
- (7) Angel-nim hi-naas-wapayata-ca ma-may'as-na. Angel-ERG 3SUBJ-O.PL-help-IMPERF PL-child-ACC 'Angel is helping the children.'

In contrast to 3rd person pronouns and DPs, local persons show a nominative/accusative case alignment – a fact that Deal (2016b) shows to be syntactic, rather than morphological, in nature. Accordingly, the clearest examples of raising-to-ergative feature 3rd person raised arguments.

The case system co-exists with a nominative-accusative system of verb agreement. Verbal affixes directly distinguish 3rd from non-3rd person and plural from non-plural number. Non-plural number and local person are not marked on the verb overtly; however, restrictions on the use of plural agreement partially distinguish 1st from 2nd person. The overt markers consist primarily of the five prefixes listed in (8). Restrictions on the use and co-occurrence of agreement affixes are described in Deal (2015c).

(8) Agreement prefixes

hi- 3rd person subject
 'e- 3rd person object
 nees- plural subject
 nees- plural object

pee- 3rd person subject and 3rd person object

Subject agreement is present in all clauses in Nez Perce, regardless of the case-marking of the subject (nominative or ergative). In both intransitive (9) and transitive (10), the subject controls 3rd person subject agreement prefix hi and plural subject agreement prefix pe. The object, being local and singular, controls no overt agreement in (10).)

- (9) [Háama kaa 'áayat] hi-pa-'ác-0-a. [man.NOM and woman.NOM] 3SUBJ-S.PL-enter-P-REM.PAST 'A man and a woman came in.'
- (10) [Matt kaa George-nim] hi-pa-'yáax̂-n-a 'iin-e cepéeletp'et-pe. [Matt.NOM and George-ERG] 3SUBJ-S.PL-find-P-REM.PAST 1SG-ACC picture-LOC 'Matt and George found me in the picture.'

The generalization is that subject agreement is controlled by the highest argument in the c-command domain of T, regardless of its case value (Deal, 2010b). 10

Object agreement and accusative case are tightly correlated in Nez Perce. As discussed by Deal (2013), a single ν P may contain only one accusative-marked DP, and it is always the second-highest DP that is marked in this way. It is this DP, furthermore, which controls object agreement. In a simplex monotransitive, the theme is marked accusative and the agent is marked ergative. The theme controls object agreement (in (11), plural object agreement prefix *nees*).

(11) Angel-nim $_{agent}$ hi-nees-cewcew-téetu nuun-e $_{theme}$. Angel-ERG 3SUBJ-O.PL-call-HAB.PRESENT 1PL-ACC 'Angel calls us.'

⁷ Subject number may alternatively be marked as a suffix, depending on the aspect; see Deal (2015c).

⁸ *Pe* harmonizes to *pa* in these examples. Nez Perce has a dominant-recessive harmony system whereby recessive vowels /æ/ (orthographic *e*) and /u/ harmonize to /a/ and /o/ in the presence of a strong vowel within the word. The fifth vowel, /i/, is transparent. See Nelson (2013).

⁹ Example (10) demonstrates 'unbalanced coordination' (Johannessen, 1998), where the case marker appears only once, at the end of the coordinate structure; see the discussion of Nez Perce coordinations in Deal (2015a, 2016b). This pattern is possible both for ergative and for accusative.

¹⁰This generalization sets aside potential A-scrambling of the object over the subject, which does not affect the agreement system. See Deal (To appear) for discussion and analysis.

In a simplex ditransitive, the goal c-commands the theme, and the goal is marked accusative. The agent is ergative, and the theme is unmarked (nominative).¹¹

'Aayat-onm_{agent} pe-'eny- \emptyset -e haacwal-a_{goal} tam'aamiin_{theme}. woman-ERG 3/3-give-P-REM.PAST boy-ACC cake.NOM 'The lady gave the boy cake.'

Just as the goal receives the only accusative case, it alone controls object agreement on the verb. In (13), the plural goal controls plural object agreement prefix *neec* (the pre-glottal allomorph of *nees*). In (14), the goal is local and singular and triggers no overt agreement; there is visibly no agreement with the plural theme.

- (13) Beth- \min_{agent} hi-neec-'ni- \emptyset -ye lepit picaloo- \max_{goal} hipt_{theme}. Beth-ERG 3SUBJ-O.PL-give-P-REM.PAST two kitten-ACC food.NOM 'Beth gave the two kittens food.'
- (14) 'Iin-e $_{goal}$ Beth-nim $_{agent}$ hi-'ni- \emptyset -ye lepit picaloo $_{theme}$. 1SG-ACC Beth-ERG 3SUBJ-give-P-REM.PAST two kitten.NOM 'Beth gave me the two kittens.'

The generalization is that the DP bearing accusative case and controlling object agreement is the highest DP in the c-command domain of v (Deal, 2013).

2.2 Diagnosing unaccusativity

Case and agreement in Nez Perce behave identically for all intransitive predicates: the subject is nominative (unmarked), and controls subject agreement for person and number. Unergatives may nevertheless be distinguished from unaccusatives via a pattern of participle formation. The participle in question, formed by suffixation of -*in*' to a verb stem, has been described as a passive (Rude, 1985). Semantically, the -*in*' participle forms a one-place predicate that holds of the verb's internal argument. If the verb is transitive, the participle describes the object.

- (15) a. *pro* 'a-lawlimq-0-a piskis-ne. 1SG 3OBJ-fix-P-REM.PAST door-ACC 'I fixed the door'.
 - b. Piskis hii-we-s lawlimq-in'. door.NOM 3SUBJ-be-PRES fix-PART 'The door is fixed.'
- (16) Situation under discussion: a boy has climbed a ladder.

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{ Hiicanwaas / #haacwal } hii-we-s hiicay-iin'. { ladder.NOM / #boy.NOM } 3SUBJ-be-PRES climb-PART 'The ladder / #the boy is climbed.'
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¹¹Nez Perce has no structural dative case. See Deal (2013) for condition C evidence that the goal c-commands the theme in Nez Perce ditransitives.

Some intransitive verbs form -in' participles as well. In this case, the sole argument position of the verb is abstracted over; thus, the subjects of these verbs are treated like the objects of transitives. This commonality between objects and a subclass of intransitive subjects allows us to diagnose unaccusativity. The examples below contrast unaccusatives, which form -in' participles, with unergatives, which do not.

- (17) *pro* lilooy-nin' /*tiy'-iin' wee-s.
 2SG be.happy-PART /*laugh-PART be-PRES
 'You are happy / *laughed.'
- (18) *pro* hii-we-s paay-nin' /*kuu-yiin'.

 3SG 3SUBJ-be-PRES come-PART /*go-PART

 'He is come / *gone.'

A partial list of Nez Perce intransitives which may be categorized as unergative or unaccusative using this diagnostic is given below.¹²

- (19) Unaccusatives (form -in' participles) k'oomay be sick, lilooy be happy, moolat boil over, paay come/arrive, peeleey be lost, niktiik lose weight, tin'uki die, tiyexti belch, wiyoos stretch out (e.g. of clothing), wuy run away/escape, 'eys be glad, 'ilece make noise
- (20) Unergatives (cannot form -in' participles) kuu go/do, misemi tell lies, tiy'e laugh, weec'ey jump, wehi bark, wewiiti travel downstream, wii cry/meow, 'imisq'uleey make a verbal mistake, 'ipsqikey'k walk around

This unaccusativity test is an instance of the broadly-attested attributive participle diagnostic, discussed by Rosen (1984) for Italian and Hoekstra (1984) for Dutch and subsequently replicated in a range of languages (i.a. Haspelmath 1994). The distribution of -in can be straightforwardly captured on Kratzer's (1996) proposal for vP structure, according to which theme arguments alone are arguments of the verb root. An unaccusative or transitive verb root is of type < e, st > (where s is the type of events); -in combines with the root and returns a property of individuals (type < e, t >). An unergative root, on the other hand, is of type < s, t >, and therefore barred by a type mismatch from combining with -in.

¹²Nez Perce verbs come in two morphological classes, "S class" and "C class" (Aoki 1994; see discussion in Deal and Wolf 2016). In the only previous proposal for an unaccusativity diagnostic in Nez Perce, Cash Cash (2004) proposes, based on semantic properties, that C class intransitives are unaccusative. This proposal largely lines up with (19) and (20), but there are exceptions: e.g. tiyexti 'belch' is an unaccusative S-class verb, whereas wii 'cry' is an unergative C-class verb.

¹³Some crosslinguistic work on this topic has concluded that attributive participle formation from intransitives requires not only unaccusativity, but also telicity (e.g. Levin and Rappaport-Hovav 1995, 151). (Other work has maintained that all unaccusatives are telic in some languages, e.g. Dutch (van Hout, 2004).) For Nez Perce, formal telicity tests have yet to be systematically explored, but initial impressions do not support a recharacterization of the *-in'* participle data in terms of telicity: e.g., among the verbs listed in (19), *paay* 'come/arrive' and *tin'uki* 'die' are likely telic, whereas *k'oomay* 'be sick' and *lilooy* 'be happy' are likely atelic.

Syntactically, the -*in*' participle is an adjective, like its crosslinguistic correlates. There are several indications that -*in*' participles are not (passive) verbs. First, they may appear in prenominal position, between a noun and a numeral or quantifier, (i). This position is not available to relative clauses (which are never prenominal; Deal 2016a) or to verbs in Nez Perce.

- (21) a. lepit lawlimq'-in 'aatamoc two fix-PART car 'two repaired cars'
- b. naaqc lilooy-nin' haacwal one be.happy-PART boy 'one happy boy'

Similarly, like adjectives, they require copulas when used predicatively. Nez Perce does not use auxiliary verbs. Contrast (ii), featuring an -in' participle and an obligatory copula, with (iii), where the same root is used verbally and no copula is present.

- (22) Haacwal *(hiiwes) lilooy-nin'. boy.NOM 3SUBJ-be-PRES be.happy-PART 'The boy is happy.'
- (iii) Haacwal hi-llooy-ca. boy.NOM 3SUBJ-be.happy-IMPERF 'The boy is happy.'

2.3 The structure of applicatives

Nez Perce has several productive applicative suffixes (Rude 1985, Deal 2010b, §1.7.4.2): *aapiik* 'away from [DP]', *aatk* 'as [DP] passes', and *uu* 'toward [DP]'. Here and throughout, I exemplify with *uu*. In the typology of Pylkkänen (2008), this and other Nez Perce applicatives are high applicatives. Crucially, they may attach to unergative verbs, such as *wii* 'cry' and *kuu* 'do/go'. Compare the simplex predicates in the (a) examples to their applicative counterparts in the (b) examples. ¹⁵

- (23) a. Kit'ic hi-wii-qa-na.

 Kit'ic.NOM 3SUBJ-cry-HAB.PAST-REM.PAST

 'Kit'ic used to meow.'
 - b. Kit'ic-nim pee-wii-nuu-qa-na Besi-ne. Kit'ic-ERG 3/3-cry-APPL-HAB.PAST-REM.PAST Bessie-ACC 'Kit'ic used to meow at Bessie.'
- (24) a. Haacwal hi-kuu-0-ye Harold-0-px. boy.NOM 3SUBJ-go-P-REM.PAST Harold-OBL-to 'The boy went over to Harold.'
 - b. Haacwal-nim pee-ky-uu-0-ye Harold-ne. boy-ERG 3/3-go-APPL-P-REM.PAST Harold-ACC 'The boy went over to Harold.'

¹⁴Rude (1985) and Deal (2010b) also analyze an additional affix, ey, as an affectee/benefactive applicative; see however Deal (2013) for evidence that this element is not an applicative but rather a case-assigning head μ (cf. Johnson 1991).

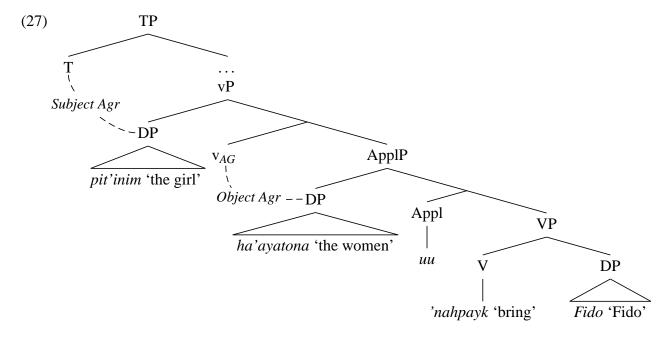
¹⁵The *uu* suffix appears in allomorphs *uu* and *nuu* depending on the stem class of the preceding element. See Deal and Wolf (2016) for discussion of this pattern as well as allomorphy of *kuu* 'do/go'.

Added to a transitive verb, the argument introduced by the applicative occupies a structural position between the agent and the theme. This position may be diagnosed by accusative case and object agreement. Recall that both agreement and accusative case are restricted to the highest object within ν P. When an applicative is added to a transitive verb, the applicative argument bears accusative case and controls object agreement. The theme argument is nominative (unmarked) and controls no agreement. Contrast the nominative case of the theme in applicative transitive (25) to the accusative case of the theme in the basic transitive (26):

- (25) Pit'in-im ha-'ayato-na hi-naac-'nahpayk-oo-0-ya Fido.
 girl-ERG PL-woman-ACC 3SUBJ-O.PL-bring-APPL-P-REM.PAST Fido.NOM
 'The girl brought Fido to the women.'
- (26) *pro* paa-'nahpayk-0-a Fido-ne. 3SG 3/3-bring-P-REM.PAST Fido-ACC 'She brought Fido.'

In the basic transitive, the theme is local to v, and shows object case and agreement. The addition of an applicative disrupts this relationship, placing the applicative argument closest to v. This indicates that the applicative projection sits above VP, but below vP, as shown in (27). Agreement relations holding in this structure are indicated with dashed lines. ¹⁶

¹⁶The nominative form of the theme here might be analyzed in either of two ways: either as reflecting a [NOM] feature assigned in syntax (e.g. by Appl), or as a morphological default, reflecting the absence of any case assignment (cp. Schütze 2001, Preminger and Kornfilt 2015). Previous research has indicated that both analyses are required for certain portions of Nez Perce grammar: nominative on intransitive subjects involves a [NOM] feature, whereas nominative on left-peripheral DPs in the hanging-topic left dislocation (HTLD) construction is a morphological default (Deal, 2016a). The difference in the status of nominative is revealed by case attraction of relative pronouns. Deal (2016a) shows that relative clauses modifying intransitive subjects allow their relative pronouns to undergo case attraction to nominative, suggesting that a [NOM] feature associated with the subject participates in (case-overwriting) Agree. By contrast, no overwriting to nominative is possible in relative clauses adjoined to base-generated left-peripheral nominatives in HTLD; this follows if no [NOM] feature is present in HTLD nominatives. For themes of ditransitives, e.g. (25), preliminary investigations suggest that case overwriting to nominative is indeed possible, revealing a [NOM] feature in this context as well, though I remain officially agnostic on this point pending further confirmation of these findings.

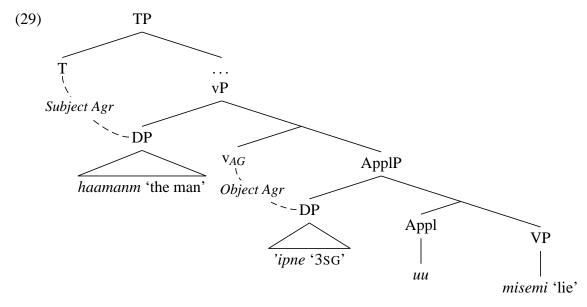


This structure extends straightforwardly to applicatives of unergatives, where VP simply lacks an internal argument.¹⁷

(28) Haama-nm pee-msem-uu-0-ye 'ip-ne. man-ERG 3/3-tell.lies-APPL-P-REM.PAST 3SG-ACC 'The man lied to her/him.'

Within the family of proposals that take Appl to be a case-assigner in structures like (27), as discussed in fn 16, the major alternative is to say that Appl comes in two varieties. One assigns [NOM] and is present in (27). The other does not, and is present in (29) as well as (potentially) cases of raising-to-ergative. On this view, Appl assigns [NOM] only on an as-needed basis.

¹⁷This structure reveals that Appl cannot be taken to *obligatorily* assign nominative to a theme. A reviewer observes a connection between this finding and Bošković's (2011) argument that the Inverse Case Filter does not hold (i.e. there is no requirement that every case-assigning head must assign its case). Suppose, then, that Appl always has a case to assign, and fails to assign it only when there is no DP within its c-command domain (as in structure (29)). It follows that themes that raise to ergative (as discussed in the next section) will initially be assigned nominative, and subsequently have their case overwritten. This connects with the proposal for case overwriting discussed in Deal (2016a).



3 Raising to ergative

From the perspective of transitive applicative structure (27), the behavior of applicative unaccusatives is perhaps surprising. In the applicative of a transitive, as we just saw, the theme is strictly nominative; in the applicative of an unaccusative, by contrast, the theme is ergative. The applicative argument remains accusative. This pattern is exemplified in (4) and in (30)-(31). Throughout this section, theme arguments are bolded, and applicative arguments are underlined. (Examples of this type show full flexibility in surface word order, like other Nez Perce clauses.)

- (30) **Taamsas-nim** pee-'leese-nuu-Ø-ye <u>Harold-ne</u>.

 Taamsas-ERG 3/3-make.noise-APPL-P-REM.PAST Harold-ACC

 'Taamsas made noise at Harold.'
- (31) Angel-na pa-pay-noo-0-ya **sik'eem-nim**.

 Angel-ACC 3/3-come-APPL-P-REM.PAST horse-ERG

 'The horse came to Angel.'

Beyond case, there are also differences between applicative unaccusatives and applicative transitives in terms of the theme's agreement. In the applicative of a transitive, the theme controls no agreement. In the applicative of an unaccusative, on the other hand, the theme controls subject agreement, whereas the applicative argument controls object agreement. In (32), the theme is third person and the applicative argument is first person. Accordingly, the verb bears overt agreement only with the third person theme subject; recall that there is no direct marking of local person features on the verb. ¹⁹

¹⁸For Shipibo, Baker (2014, 366) notes that applicatives of unaccusatives are accepted by only two of his three consultants; I have found no similar variation in Nez Perce. Examples of this type are readily obtained in elicitation and are attested in corpora of different types (see e.g. (42), (50), and dictionary entries in Aoki 1994, 515).

¹⁹The presence of a first person argument is marked in (32b) on the inferential evidential 'eete. As discussed in Deal (2015b) and in §4 below, this item participates in a system of omnivorous person agreement which, in Nez Perce, is characteristic of the C system.

- (32)a. **K'olalk'olal-nim** hi-'leese-nuu-0-ye 3SUBJ-make.noise-APPL-P-REM.PAST 1SG bell-ERG 'The bell rang at me.'
 - b. 'Eetee-x peexwiy'ew'eet-unm hi-pay-noo-sa 3SUBJ-come-APPL-IMPERF 1SG INFER-1 thief-ERG 'Surely a thief is coming in on me!'

In (33), the theme is local person and the applicative argument is third person. Accordingly, the verb bears overt agreement only with the third person applicative object.²⁰

- a. c'alawi 'ee 'a-pay-noo-yo'qa (33)Meeli-ne cik'eet-0-pe 2SG.CLITIC 3OBJ-come-APPL-MODAL Mary-ACC night-OBL-at 'if you came up to Mary at night'
 - b. *pro* 'a-pay-noo-toq-0-a pit'ini-ne. 1SG 3OBJ-come-APPL-REST-P-REM.PAST girl-ACC 'I came back to the girl.'

Finally, in (34), the theme is third person singular and the applicative argument is first person plural. The verb shows plural object agreement with the applicative argument and 3rd person subject agreement with the theme.

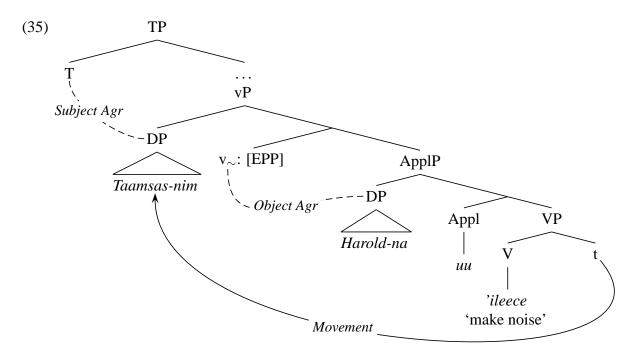
'Inpew'eet-um kiye hi-nees-pay-noo-yo'! policeman-ERG 1PL.INCL.CLITIC 3SUBJ-O.PL-come-APPL-FUT 'A cop will come to us!'

Across these examples, theme arguments participate in subject agreement in exactly the same way as external arguments do in unergatives and transitives. Supposing, as above, that subject agreement is controlled by the highest DP in the c-command domain of T, this suggests that the theme argument raises over the applicative argument.

What is the landing site of this movement? Legate (2003) and Deal (2009) argue that all verbal projections contain a phasal vP layer, even in passives and unaccusatives.²¹ I indicate the nonthematic v head characteristic of unaccusatives as v_{\sim} , following the convention of Deal (2009); I assume that this head obligatorily bears an [EPP] feature in Nez Perce. The structure of example (30) is thus as shown in (35). (The motivation for movement of the theme, rather than the applicative argument, is taken up in the next section.)

²⁰On the clitic pronouns seen in (33a) and (34), see Deal (2016b).

²¹This point will prove crucial for the antilocality-based account of raising to ergative given in the next section. That is of course not to say that all controversies related to the issue are settled: extensive further discussion of vP phases (and how we might diagnose them) may be found in Fox (1999), Nissenbaum (2000), Sauerland (2003), Rackowski and Richards (2005), Richards and Biberauer (2005), den Dikken (2006), Johnson (2007), Newell (2008), Baker (2014), van Urk and Richards (2015), and Keine (2016), among others.



Movement of the theme to the nonthematic specifier of v_{\sim} produces the standard configuration for subject and object agreement: both T and v agree with the highest DPs in their domains.

The structure in (35) receives further support from two types of binding phenomena. The first involves condition C. In examples (36) and (37), the theme contains a possessor R-expression coindexed with a pronominal applicative argument. These examples are well-formed.

- (36) **Harold-nim**_i **k'olalk'olal-nim** pee-'leese-nuu-0-ye <u>pro</u>_i.

 Harold-GEN bell-ERG 3/3-make.noise-APPL-P-REM.PAST 3SG
 'Harold_i's bell made noise at him_i.'
- (37) $\frac{\text{'ip-ne}_i}{3\text{SG-ACC}}$ pa-pay-noo- \emptyset -ya Angel-nim_i sik'em-nim. Angel-GEN horse-ERG 'Angel_i's horse came to her_i.'

If the theme argument remained *in situ*, this configuration would be expected to produce a condition C violation, given that applicatives attach above VP. Indeed, in an applicative transitive, coindexation of a theme possessor R-expression with an applicative argument produces ungrammaticality.

- (38) pro [**Angel**_i-**nim hipt**] 'aw-'nahpayk-oo-yo' $pro_{j/*i}$.

 1SG [Angel-GEN food.NOM] 3OBJ-bring-APPL-FUT $\overline{3}$ SG
 I will bring Angel_i's food to him/her/it_{j/*i}
- (39) pro 'ip-ne_{i/*j} 'ew-'nik-uu-se [Keelpin-im_j kuus]. 1SG 3SG-ACC 3OBJ-place-APPL-IMPERF Calvin-GEN water.NOM 'I am putting Calvin_j's water out for him/her/it_{i/*j}'

The absence of a parallel condition C effect in (36) and (37) therefore supports the claim that the theme subject moves out of the c-command domain of the applicative argument.

The second argument draws on the interaction of binding and case. As discussed by Rude (1985) and Deal (2010a,b), ergative and accusative case-marking are obligatorily absent in Nez Perce when the subject binds the (highest) object's possessor. Both arguments become nominative and only the subject agrees with the verb. This pattern is dubbed the 'extended reflexive' by Deal (2010a) (following Aissen 1999); see the analysis there and in Deal (2010b, 187-338). This pattern extends to instances of subjects binding possessors of applicative arguments, as shown in (40b).

```
(40) a. Angel<sub>i</sub> [ pro<sub>i</sub> pike ] hi-muu-n-e.
Angel.NOM [ 3SG(GEN) mother.NOM ] 3SUBJ-call-P-REM.PAST
'Angel<sub>i</sub> called her<sub>i</sub> mother.'
b. Angel<sub>i</sub> hi-ky-uu-Ø-ye [ pro<sub>i</sub> sik'em ].
Angel.NOM 3SUBJ-go-APPL-P-REM.PAST [ 3SG(GEN) horse.NOM ]
'Angel<sub>i</sub> went over to her<sub>i</sub> horse.'
```

Coindexation between the *subject* possessor and the *object* (or applicative argument), on the other hand, does not affect case or agreement. Observe the ergative suffix and object agreement (in the form of 3-on-3 portmanteau *pee*) reappearing in (41).

```
(41) a. [pro<sub>i</sub> pike-pim] pee-muu-n-e pro<sub>i</sub>
[3SG(GEN) mother-ERG] 3/3-call-P-REM.PAST 3SG
'Her<sub>i</sub> mother called her<sub>i</sub>.'
b. [pro<sub>i</sub> sik'eem-nim] pee-ky-uu-Ø-ye pro<sub>i</sub>
[3SG(GEN) horse-ERG] 3/3-go-APPL-P-REM.PAST 3SG
'Her<sub>i</sub> horse went over to her<sub>i</sub>.'
```

The contrast between (40) and (41) shows that the case and agreement patterns are affected only when a possessor is c-commanded by a coindexed argument. Coindexation itself is insufficient – it is binding that crucially matters.

Against this backdrop, observe that applicatives of unaccusatives give rise to the extended reflexive pattern: when the theme argument binds the possessor of the applicative argument, ergative and accusative case and object agreement are lost. In parallel to the contrast between (40) (with binding) vs. (41) (with coreference), binding examples (42) and (43) contrast with examples (36) and (37) above, where the theme possessor is merely coreferential with the applicative argument and we find the full ergative/accusative case pattern.

```
Waaqo' 'im-'toot_i hi-pay-noo-\emptyset-ki-ka [ \underline{pro}_i \underline{yo\hat{x}} now 2SG-father.NOM 3SUBJ-come-APPL-P-TRANS-REM.PAST [ \overline{3}SG(GEN) \overline{D}EM \underline{\hat{x}ay\hat{x}ay\hat{x}} pineexsin ]. white daughter.in.law.NOM ] 'Now [your father]_i went off to his_i white (duck) daughter-in-law.' (Aoki and Walker, 1989, 14)
```

```
(43) pro<sub>i</sub> ['ip-nim<sub>i</sub> sik'em] hi-pay-noo-0-ya.

3SG [3SG-GEN horse.NOM] 3SUBJ-come-APPL-P-REM.PAST

'She<sub>i</sub> came to her<sub>i</sub> horse.'
```

The extended reflexive pattern would not be expected if the theme remained *in situ* in these examples. There is no c-command relation between the possessor of the applicative argument and the base position of the theme; therefore, there can be no binding. When the theme moves past the applicative argument to $\operatorname{Spec}, v_{\sim}$, however, it comes to c-command the possessor of the applicative argument. This c-command relation establishes the binding configuration that proves crucial to determining the extended reflexive pattern.

Overall, both for binding and for agreement, the theme of an applicative unaccusative behaves exactly like any other subject, and the applicative argument itself behaves exactly like any other (highest) object. These facts receive a straightforward analysis in view of the structure in (35), in which the theme raises past the applicative argument.

Returning now to the Ergative Case Generalization, it can hardly be a coincidence that theme movement occurs in exactly those structures in which the theme also receives ergative case. Ergative case in transitives is always assigned to the highest DP in the clause; this generalization, we now see, applies to applicative unaccusatives as well. The generalization would not be captured if (for instance) the theme argument were assigned case in its base position, and subsequently, independently moved to Spec, v_{\sim} .²² The facts suggest instead that ergative case in Nez Perce is assigned to the highest DP by a mechanism independent of θ -assignment. The theme receives ergative case no lower than its derived position on the vP edge.

In conclusion: Nez Perce demonstrates raising to ergative.

4 Inversion, locality, and anti-locality

We turn now to the question of locality in the raising-to-ergative structure (35). Why does the theme move over the applicative argument? Why isn't it the applicative argument which raises to νP to satisfy the [EPP] feature of $\nu \sim$?

For Baker (2014), as discussed above, the solution to the parallel puzzle in Shipibo goes by way of a covert adpositional structure present in the specifier of the applicative. His proposal for the structure of (44) is repeated in (45). The PP structure, Baker proposes, prevents the applicative argument from undergoing movement and from interfering in movement of the theme.

(44) Bimi-n-ra Rosa joshin-xon-ke. fruit-ERG-EV Rosa.ABS ripen-APPL-COMPL 'The fruit ripened for Rosa.' (Baker, 2014, 346)

[45]
$$[TP]$$
 fruit.ERG $_i$ T $[ApplP]$ $[PP]$ Rosa.ABS $[TP]$ Appl $[TP]$ ripen $[TP]$ $[TP]$

Yet there is a curious shortage of independent evidence for the proposed PP structure in Shipibo, and the same can be said about a potential counterpart PP structure in Nez Perce. In Nez Perce,

²²This type of proposal would presumably require the theme to move iff it previously obtained ergative. (If themes could generally move above other objects, we would expect this movement to bleed Condition C in (38)-(39), for instance.) Note that even on theories that allow movement to be sensitive to case assignment (e.g. Otsuka 2006, Preminger 2014, Deal 2016c), it is not possible for a movement rule to apply only to an ergative-marked theme but not to a nominative-marked theme. Any movement that applies to ergatives must also apply to nominatives (though not vice versa).

like in Shipibo, the applicative argument has the surface morphosyntax of a DP, not a PP. The best candidates for PPs in Nez Perce are oblique phrases formed with a series of bound morphemes, e.g. -ki 'with (an instrument)', -(p)kin'ix 'from', -laykin 'near', -pe 'on/at', -wecet 'because of', -(p)x 'to/than', -'ayn 'for'. These elements assign oblique case to their complements; oblique case is overtly marked only for pronouns.

(46) a. 'ip-ním-x b. 'ip-ním-wecet c. 'ip-nim-pé 3SG-OBL-to 3SG-OBL-because 3SG-OBL-on 'to him/her/it' 'because of him/her/it' 'on him/her/it'

Oblique phrases do not participate in verbal agreement and do not count as arguments for the determination of transitivity; e.g. their presence does not render the subject ergative.

(47) Haacwal hi-kuu-0-ye Harold-0-px. boy.NOM 3SUBJ-go-P-REM.PAST Harold-OBL-to 'The boy went over to Harold.'

Oblique phrases are also opaque for complementizer agreement. In Nez Perce, complementizer agreement occurs on a variety of C-domain elements (e.g. relativizer ke, inferential evidential 'eete) and indexes features of either the subject or the object; this is an omnivorous (person) agreement pattern (cf. Nevins 2011). The system is described and analyzed in Deal (2015b). We see omnivorous agreement in 1st person with subjects and objects in (48); compare the ungrammaticality of agreement with the oblique in (49).

- (48) a. ke-x kaa *pro* 'e-cewcew-tée-'nix Angel-ne C-1 then 1PL 3OBJ-call-HAB.PRES-S.PL Angel-ACC 'when we call Angel'
 - b. ke-x kaa Angel-nim hi-nees-cewcew-téetu nuun-e
 C-1 then Angel-ERG 3SUBJ-O.PL-call-HAB.PRES 1PL-ACC
 'when Angel calls us'
- (49) ke(*-x) kaa qetu haamti'c *pro* hi-wleeke'yk-sa-qa 'iin-im-x C(*-1) then more fast 3SG 3SUBJ-run-IMPERF-REC.PAST 1SG-OBL-than 'when she was running faster than me'

In all of these respects, applicative arguments behave unlike obliques. If the applicative argument were a PP, we would expect the DP subconstituent thereof to be marked with oblique case (even if the adposition itself were covert); however, the applicative argument is marked accusative. Compare the form of the pronoun in applicative unaccusative (50) to its PP counterparts in (46).

(50) Wa'yaat-0-kin'ix wi-weepcux-nim 'ip-ne pa-pay-noo-0-ya. far-OBL-from PL-wise-ERG 3SG-ACC 3/3-come-APPL-P-REM.PAST 'From afar, the wise ones came to him.' (Nez Perce Methodist Songbook)

We would also not expect the applicative argument to participate in object agreement or to render the clause transitive for the purposes of ergative case assignment. Finally, we would not expect the applicative argument to be visible for complementizer agreement. Yet applicative arguments fully participate in the omnivorous agreement system just like ordinary objects do.

- (51) ke-x kaa sik'eem-nim hi-pay-noo-0-ya pro C-1 then horse-ERG 3SUBJ-come-APPL-P-REM.PAST 1SG 'when the horse came to me'
- (52) 'Eetee-x peexwiy'ew'eet-unm hi-pay-noo-sa pro!
 INFER-1 thief-ERG 3SUBJ-come-APPL-IMPERF 1SG
 'Surely a thief is coming in on me!'

These facts show that the initial challenges for the PP analysis in Shipibo are also challenges in Nez Perce.²³

Nez Perce also allows us to mount an argument against the PP analysis from the interaction of applicative unaccusatives with possessor raising. This argument has two prongs, the first concerning the general question of why PPs are opaque for movement. While Baker (2014) does not state why his PP structures prevent material within PP from moving, one reasonable hypothesis is simply that they are phases without escape hatches. ²⁴ If PP is a phase without an escape hatch, we expect both that the DP complement of P will not be able to move out of PP and that material internal to this DP will not be able to move out of PP. Yet Nez Perce not only permits but indeed requires subextraction from applicative arguments under certain circumstances. In particular, when the applicative argument contains a (free) possessor, the possessor must undergo possessor raising.

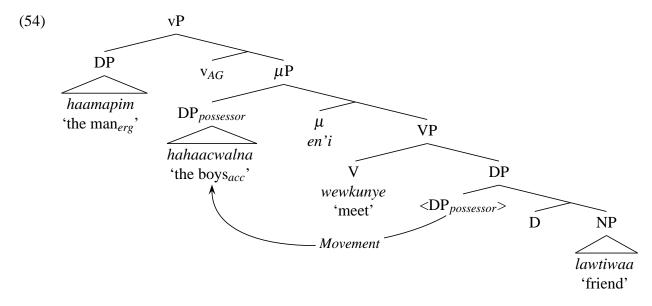
Possessor raising in Nez Perce is described in Deal 2013. When the highest DP in the c-command domain of v contains an unbound possessor in Spec,D, the possessor obligatorily moves to the specifier of a functional head, μ , which attaches directly below vP. The μ head is realized morphologically as a suffix on the verb, ey'/en'i. In its raised position, the possessor is the highest DP in the c-command domain of v, and so receives accusative case and controls object agreement. The structure of possessor raising in simplex transitive (53) is shown in (54).

(53) Háama-pim hi-nées-wewkuny-en'y- \emptyset -e ha-háacwal-na láwtiwaa. man-ERG 3SUBJ-O.PL-meet- μ -P-REM.PAST PL-boy-ACC friend.NOM 'The man met the boys' friend.'

²³The Nez Perce facts might productively be contrasted with the situation in certain varieties of British English, where Myler (2013) finds both syntactic and semantic evidence for covert adpositions.

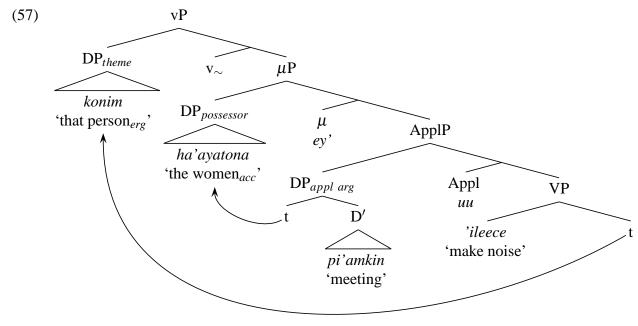
²⁴An alternative approach might appeal to a morphological ban on P-stranding. Such a ban could prevent overt movement of the applicative DP, but presumably not covert movement. See Deal (2013, To appear) for evidence of covert A-movement in Nez Perce.

²⁵On the allomorphy of μ , see Deal and Wolf (2016). Deal (2013) argues that μ is a case-assigner and is structurally present only when needed for case-assignment purposes.



In addition to possessor raising from a theme, as in (53)-(54), it is perfectly possible to have possessor raising out of an applicative argument, even in the applicative of an unaccusative. In (55) and (56), formed from unaccusative roots, the suffix ey realizes μ . Example (55) shows that the raised possessor may be discontiguous with the possessum, as is standardly the case in possessor raising (but is not otherwise permitted in Nez Perce; Deal 2013, 399-400). Note that themes continue to control subject agreement in these examples, as in other applicative of unaccusative examples. The structure of (55) is shown in (57) (assuming no PP is present in the ApplP specifier).

- (55) Ko-nim ha-'ayato-na hi-nees-'ilese-nuu-ey'-se pi'amkin. DEM-ERG PL-woman-ACC 3SUBJ-O.PL-make.noise-APPL- μ -IMPERF meeting.NOM 'That person is making noise at the ladies' meeting.'
- (56) pro pe-'eys-nuu-ey'-se B.-ne miy'ac. 3SG 3/3-be.glad-APPL- μ -IMPERF B-ACC child.NOM 'She is being nice to B's child.'



These examples show that the motivation for theme movement cannot simply be a fully syntactically opaque PP in the applicative specifier.²⁶

This brings us to the second prong of the argument from possessor raising, which concerns the potential for further raising of the raised possessor. The crux of the matter here is intervention: even if possessor raising were somehow able to escape a Baker-style PP structure in the applicative specifier, the raised possessor itself should count as a DP intervener for movement of the theme. (This possessor is, after all, able to undergo A-movement; it A-moves to Spec, μ .) Nevertheless, there is no bleeding of theme movement in possessor raising constructions like (55) and (56), and no raising-to-subject of the possessor DP. This reveals that factors other than PP status are needed in order to prevent non-theme elements from undergoing A-movement to subject in at least some theme-raising structures. A full explanation for theme raising therefore cannot be given simply on the basis of applicative specifiers being PPs.

If the applicative argument is indeed a DP, then, rather than a PP, what prohibits it from moving to satisfy the [EPP] feature on v_{\sim} ? I would like to propose that it is the height of this argument, rather than its categorial status, which imposes the crucial constraint. Beginning with simplex structure (35) (without possessor raising), the applicative argument attaches immediately subjacent to v, and thus movement from Spec,Appl to Spec,v is too short. It violates an antilocality constraint independently motivated on the basis of \bar{A} extraction data by Bošković (2015, 2016), Erlewine (2016), and Brillman and Hirsch (To appear). I present a generalized version of Erlewine's formulation in (58).²⁷

- (58) Generalized Spec-to-Spec Antilocality: Movement of a phrase from the Specifier of XP must cross a maximal projection other than XP.
- (59) *Definition of crossing*: Movement from position A to position B crosses C if and only if C dominates A but does not dominate B.

Movement from Spec,Appl to Spec, v_{\sim} in (35) crosses ApplP, but no other maximal projection.²⁸ This violates Generalized Spec-to-Spec Antilocality. I suggest that the inability of the applicative argument to undergo movement frees the theme argument to move in its stead: because the applicative argument, in virtue of its position, cannot move, it also does not serve as an intervener for movement.

²⁶This argument is weakened if some alternative conception of PP opacity could be given such that complements of P cannot extract, but subconstituents of P's complement can. Abels' (2003) conception of antilocality could be called on, for instance, to exactly this effect, provided PPs in the relevant structure are phases.

²⁷This constraint is 'generalized' in that it applies both to A- and to Ā-movement; the application to A-movement is in keeping with early work by Bošković (1997) (though the version of antilocality used in that work is slightly different). Recent critical discussion of antilocality in Ā extraction can be found in Baier (2017) and Henderson and Coon (To appear). See Grohmann (2011) for discussion of various formulations of antilocality constraints, along with historical antecedents.

²⁸Antilocality accounts, as Baier (2017) notes, are inherently 'fragile'; they are easily disturbed by the discovery of new projections in the region of interest, rendering two positions farther apart than initially thought. As a theoretical matter, I suggest we should welcome this aspect of the theory: fragility means straightforward falsifiability, which is a virtue. As an empirical matter, I am not aware of any projections between Appl and ν in Nez Perce other than μ , discussed just below.

For possessor-raised applicative unaccusatives, Generalized Spec-to-Spec Antilocality plays a role in blocking movement not of the applicative argument, but of its raised possessor. In structure (57), the raised possessor in Spec, μ is too close to Spec, ν to undergo movement. The remnant applicative argument itself is far enough from ν to move there, but may only move in keeping with general constraints on remnant movement. One such constraint is proposed by Müller (1996) under the heading of *Unambiguous Domination* (presented here in its derivational version, p 376):

(60) Unambiguous Domination: In a structure ... [A ... [B ...] ...] ..., A and B may not undergo the same kind of movement.

Movement to Spec, μ and to Spec, ν_{\sim} both are A-movement: each plays a decisive role in determining the case, agreement, and binding behavior of the moving DP. Given that a subconstituent of the applicative argument undergoes A-movement, Unambiguous Domination implies that the applicative argument will not itself be able to undergo A-movement. This means that both the highest *and* second-highest DPs in structure (57) are unable to satisfy the [EPP] feature on ν_{\sim} . Again we see that DPs incapable of undergoing movement do not serve as interveners. Only the theme argument is capable of undergoing movement, and therefore there is no obstacle to theme movement into the ν P specifier position.

The resulting analysis, like Baker's PP analysis before it, comes with consequences for the theory of (defective) intervention. I have argued that applicative arguments are DPs, not PPs, in Nez Perce; one DP nevertheless fails to intervene on the movement of another DP if it is itself blocked from movement by antilocality or by the Unambiguous Domination requirement on remnant movement. These results suggest either (less radically) that defective intervention is possible only on the basis of other properties of the intervener, such as PP status (i.a. Preminger 2014), or (more radically) that defective intervention does not exist in grammar (Bruening 2014) – a choice point whose resolution must await fuller attention in subsequent work.²⁹

²⁹ The antilocality approach has a variety of additional consequences worthy of further attention; for instance, as a reviewer points out, it is incompatible with the derivation of Shipibo experiencer constructions posited by Baker (2014), which features Spec, V to Spec, v movement. If (58) holds as a general principle of grammar, then (as the reviewer suggests) a reasonable first hypothesis is that an additional projection is present in the Shipibo vP, rendering the movement in question sufficiently long. Among the most plausible candidates for a vP internal projection of this type is inner aspect (Travis, 2010). If Shipibo experiencers originate in Spec, V, then the presence of AspP between VP and vP will allow experiencers to move to Spec, v in a way that respects antilocality. ApplP must be located above AspP, however, blocking similar movement from Spec, Appl. I am not aware of any Shipibo-internal evidence that speaks either for or against this hypothesis. Further alternatives are of course possible as well, e.g. a treatment of experiencers as base-generated in Spec, v (Kratzer, 1996). This possibility requires more deviation from Baker 2014 than does the first option sketched above: it requires some rethinking of Baker's tests for internal vs. external arguments, for instance, as well as an alternative analysis of case in Shipibo experiencer constructions. Overall, there is clearly more to be done empirically to assess the prospects for Shipibo of an antilocality principle of grammar.

5 Ergativity: larger consequences

The elimination of the inherent case analysis for Nez Perce, a raising-to-ergative language, raises two types of further questions, with which I conclude this paper. One concerns the underlying typology of ergativity: how many mechanisms give rise to ergative systems? The second concerns the nature of ergativity in languages to which the inherent case analysis cannot be applied.

5.1 Are there inherent-ergative languages?

There is substantial agreement in the ergativity literature that ergativity is not one but many phenomena.³⁰ This raises a basic question: is there more than one way to assign ergative case? Applicative unaccusatives have the potential to show that indeed there is – that some languages call for an inherent case analysis, whereas others cannot be so analyzed.

Some potential evidence that there are indeed inherent ergative languages comes from Massam's (2006) work on applicatives in Niuean. In contrast to the Shipibo/Nez Perce pattern, the applicative of an unergative in this language features ergative on the agent subject, (61), but the applicative of a (putative) unaccusative does not allow ergative on the theme subject, (62).

- (61) Ne tohitohi aki [e Sione] [e pene]
 PAST writing with.APPL [ERG.PROPER Sione] [ABS.COMMON pen]
 'Sione was writing with a pen.' (Massam, 2006, 33)
- (62) Fakamafana aki [e poko] [e hita]. CAUSE-warm with.APPL ABS.COMMON room ABS.COMMON heater 'The room is warm with the heater.' (Massam, 2006, 34)

Does this constitute the required evidence that ergativity arises by an inherent-case-based mechanism in some languages, as Legate (2012) suggests? While I can contribute nothing decisive about Niuean, I would like to suggest (in keeping with remarks by Massam) that the presence of the causative in the purportedly unaccusative example poses a potential confound. As Massam (1998) discusses, the *aki* applicative is not possible for an unaccusative verb in the absence of the causative marker: "*aki* cannot attach to a semantically nonagentive verb" (p. 12). If examples like (62) were not unaccusative, then, but in fact transitive, with a null ergative causer argument, then there would be no strong reason to think Niuean is different from Nez Perce after all. I take this conclusion to largely dovetail with Massam's recent proposal that the causative head in examples like (62) functions much like an external argument (Massam, 2015).

I suggest, then, that as far as applicative unaccusatives are concerned, the case remains open on Baker and Bobaljik's (2017) proposal that ergative is never in fact an inherent case. While it is certainly true that the inherent ergative view is broadly compatible with evidence from various languages (see e.g. Legate 2012 on Warlpiri, Coon 2017a on Ch'ol), the ideal argument for crosslinguistic variation in the nature of ergative case will come from apples-to-apples comparison of applicative unaccusatives in languages where the raised theme subject does and does not receive ergative. At present, pending further investigation of (62), there is no clear case of a language that shows the second type of pattern.

³⁰See Levin 1983, Bittner and Hale 1996a,b, Johns 1992, 2000, Paul and Travis 2006, Wiltschko 2006, Aldridge 2008, Legate 2008, Rezac et al. 2014, Deal 2015a, Polinsky 2016, Clem 2017.

5.2 Is ergative dependent or (merely) structural?

For Baker (2014), the inapplicability of the inherent case analysis to Shipibo constitutes core evidence for an alternative, dependent case analysis, based on rules of case assignment like (63).

(63) If there are two distinct argumental NPs in the same phase such that NP₁ c-commands NP₂, then value the case feature of NP₁ as ergative unless NP₂ has already been marked for case.

The dependent case proposal for ergative (and accusative) has garnered considerable attention in recent years, in a development that should be of interest to all who are concerned with the nature of crosslinguistic variation.³¹ Given that case systems vary, rules like (63) must hold in some languages and not in others, but notably, these rules are not themselves properties of any lexical item. Thus, the endorsement of a dependent case theory of this type brings as a consequence a retreat from the Chomsky-Borer conjecture about linguistic variation – a retreat which, of course, Baker himself has advocated for many years (e.g. Baker 1996, 2008).³²

Yet the dependent case analysis is not the only non-inherent approach to ergative case remaining on the table. Indeed, a variety of proposals for a merely structural ergative are also compatible with the raising to ergative pattern.³³ Deal (2010a,b), for instance, proposes a reductionist view according to which the Nez Perce ergative suffix is a portmanteau of subject and object agreement features transferred onto a DP: it is inserted on DPs which agree with T and which occupy the specifier of a ν head which agrees with an object. This configuration holds for themes raised to ν P just like for agents that originate there. Deal (2010a,b) shows how this view explains the connection between case and binding ("extended reflexive") discussed in §3; Deal (2016b) shows how it may be extended to capture the syntactic nature of person-based split ergativity. On this view, the properties of Nez Perce which differentiate it from other types of case systems may be stated in relatively quotidian terms: they concern properties of agreement probes and of vocabulary items. Empirically, the choice between this or another 'merely structural' approach to ergativity and the dependent case approach should be made on the basis of properties beyond raising-to-ergative, such as the interaction of case with binding and with person. To my knowledge, the dependent case view does not at present provide a natural way for these phenomena to be accommodated.

Versions of dependent case theory more compatible with the Borer-Chomsky Conjecture might of course in principle be developed, perhaps with Bittner and Hale (1996b) as a central antecedent.

³¹See, for instance, Baker and Vinokurova 2010, Baker 2012, Myler 2013, Preminger 2014, Levin and Preminger 2015, Poole 2015, Deal 2016c, Levin 2017, Imanishi 2017, Wood To appear, Jenks and Sande To appear.

³²The term 'Chomsky-Borer conjecture' is Baker's (2008), with reference to Borer (1984) and Chomsky (1995). Baker's formulation is given in (i).

⁽i) *Borer-Chomsky Conjecture:* All parameters of variation are attributable to differences in the features of particular items (e.g., the functional heads) in the lexicon.

³³On structural approaches to ergative, see, i.a., Bobaljik and Branigan (2006), Deal (2010a,b), Rezac et al. (2014), Erlewine (2016), Clem (2017).

References

- Abels, Klaus. 2003. Successive cyclicity, anti-locality, and adposition stranding. Doctoral Dissertation, University of Connecticut.
- Aissen, Judith. 1999. Markedness and subject choice in Optimality Theory. *Natural Language and Linguistic Theory* 17:673–711.
- Aldridge, Edith. 2008. Generative approaches to ergativity. *Language and Linguistics Compass* 2:966–995.
- Aoki, Haruo. 1994. Nez Perce dictionary. Berkeley: University of California Press.
- Aoki, Haruo, and Deward Walker. 1989. *Nez Perce oral narratives*. Berkeley: University of California Press.
- Artiagoitia, Xabier. 2001. Seemingly ergative and ergatively seeming. In *Features and interfaces in Romance*, ed. J Herschensohn et al. John Benjamins.
- Baier, Nico. 2017. Antilocality and antiagreement. *Linguistic Inquiry* 48:367–377.
- Baker, Mark. 1996. The polysynthesis parameter. Oxford: Oxford University Press.
- Baker, Mark. 2008. The macroparameter in a microparametric world. In *The limits of syntactic variation*, ed. Theresa Biberauer. John Benjamins.
- Baker, Mark. 2012. On the relationship of object agreement and accusative case: Evidence from Amharic. *Linguistic Inquiry* 43:255–274.
- Baker, Mark. 2014. On dependent ergative case (in Shipibo) and its derivation by phase. *Linguistic Inquiry* 45:341–379.
- Baker, Mark. 2015. Case: its principles and its parameters. Cambridge University Press.
- Baker, Mark, and Jonathan David Bobaljik. 2017. On inherent and dependent theories of ergative case. In *The Oxford Handbook of Ergativity*, ed. Jessica Coon, Diane Massam, and Lisa Travis. Oxford University Press.
- Baker, Mark, and Nadya Vinokurova. 2010. Two modalities of case assignment in Sakha. *Natural Language and Linguistic Theory* 28:593–642.
- Bittner, Maria, and Ken Hale. 1996a. Ergativity: Toward a theory of a heterogeneous class. *Linguistic Inquiry* 27:531–604.
- Bittner, Maria, and Ken Hale. 1996b. The structural determination of case and agreement. *Linguistic Inquiry* 27:1–68.
- Bobaljik, Jonathan, and Philip Branigan. 2006. Eccentric agreement and multiple case-checking. In *Ergativity: emerging issues*, ed. Alana Johns, Diane Massam, and Juvénal Ndayiragije.
- Borer, Hagit. 1984. Parametric syntax. Dordrecht: Foris Publications.
- Bošković, Željko. 1997. *The syntax of nonfinite complementation: An economy approach*. Cambridge, Massachusetts: MIT Press.
- Bošković, Željko. 2011. On unvalued uninterpretable features. In *NELS 39: Proceedings of the 39th Annual Meeting of the North East Linguistic Society*, ed. Suzi Lima, Kevin Mullin, and Brian Smith. Amherst, MA: GLSA.
- Bošković, Željko. 2015. From the complex NP constraint to everything: On deep extractions across categories. *The Linguistic Review* 32:603–669.

- Bošković, Željko. 2016. On the timing of labeling: Deducing comp-trace effects, the subject condition, the adjunct condition and tucking in from labeling. *The Linguistic Review* 33:17–66.
- Brillman, Ruth, and Aron Hirsch. To appear. An anti-locality account of English subject/non-subject asymmetries. In *Proceedings from the 50th Annual Meeting of the Chicago Linguistic Society*.
- Bruening, Benjamin. 2014. Defects of defective intervention. *Linguistic Inquiry* 45:707–719.
- Carnie, Andrew, and Phillip Cash Cash. 2006. Tree-geometric relational hierarchies and Nuumiipuutímt (Nez Perce) case. In *Ergativity: emerging issues*, ed. Alana Johns, Diane Massam, and Juvénal Ndayiragije, 229–244. Springer.
- Cash Cash, Phillip. 2004. Nez Perce verb morphology. Ms., University of Arizona.
- Chomsky, Noam. 1995. The minimalist program. Cambridge, Mass: MIT Press.
- Clem, Emily. 2017. Amahuaca ergative as agreement with multiple heads. Manuscript, Berkeley.
- Coon, Jessica. 2016. Case discrimination in caseless languages. Stanford colloquium handout, May 2016.
- Coon, Jessica. 2017a. Little-v agreement and templatic morphology in Ch'ol. Syntax 20:101–137.
- Coon, Jessica. 2017b. Two types of ergative agreement: implications for case. In *A Pesky Set:* papers for David Pesetsky, ed. Claire Halpert, Hadas Kotek, and Coppe van Urk, 361–370. MITWPL.
- Crook, Harold David. 1999. The phonology and morphology of Nez Perce stress. Doctoral Dissertation, University of California at Los Angeles.
- Deal, Amy Rose. 2009. The origin and content of expletives: Evidence from "selection". *Syntax* 12:285–323.
- Deal, Amy Rose. 2010a. Ergative case and the transitive subject: a view from Nez Perce. *Natural Language and Linguistic Theory* 28:73–120.
- Deal, Amy Rose. 2010b. Topics in the Nez Perce verb. Doctoral Dissertation, University of Massachusetts Amherst.
- Deal, Amy Rose. 2013. Possessor raising. *Linguistic Inquiry* 44:391–432.
- Deal, Amy Rose. 2015a. Ergativity. In *Syntax theory and analysis. an international handbook*, ed. A. Alexiadou and T. Kiss, volume 1, chapter 20, 654–707. Berlin: Mouton de Gruyter.
- Deal, Amy Rose. 2015b. Interaction and satisfaction in ϕ -agreement. In *Proceedings of NELS 45*, ed. Thuy Bui and Deniz Ozyildiz, 179–192. Amherst: GLSA.
- Deal, Amy Rose. 2015c. A note on Nez Perce verb agreement, with sample paradigms. In *Proceedings of the International Conference on Salish and Neighbouring Languages 50*, ed. Natalie Weber et al., 389–413. Vancouver: UBCWPL.
- Deal, Amy Rose. 2016a. Cyclicity and connectivity in Nez Perce relative clauses. *Linguistic Inquiry* 47:427–470.
- Deal, Amy Rose. 2016b. Person-based split ergativity in Nez Perce is syntactic. *Journal of Linguistics* 52:533–564.
- Deal, Amy Rose. 2016c. Syntactic ergativity: analysis and identification. *Annual Review of Linguistics* 2:165–185.

- Deal, Amy Rose. To appear. Covert hyperraising to object. In *Proceedings of NELS 47*, ed. Andrew Lamont and Katerina Tetzloff. Amherst, MA: GLSA.
- Deal, Amy Rose, and Matthew Wolf. 2016. Outwards-sensitive phonologically-conditioned allomorphy in Nez Perce. In *The morphosyntax-phonology connection*, ed. V. Gribanova and S. Shih, 29–60. Oxford: Oxford University Press.
- den Dikken, Marcel. 2006. A reappraisal of vP being phasal: a reply to Legate. Ms CUNY.
- Erlewine, Michael Yoshitaka. 2016. Anti-locality and optimality in Kaqchikel agent focus. *Natural Language and Linguistic Theory* 34:429–479.
- Fox, Danny. 1999. Reconstruction, binding theory, and the interpretation of chains. *Linguistic Inquiry* 30:157–196.
- Grohmann, Kleanthes K. 2011. Anti-locality: Too-close relations in grammar. In *The Oxford handbook of linguistic minimalism*, ed. Cedric Boeckx, 260–290. Oxford: Oxford University Press.
- Haspelmath, Martin. 1994. Passive participles across languages. In *Voice: form and function*, ed. Barbara Fox and Paul J Hopper, 151–177.
- Henderson, Robert, and Jessica Coon. To appear. Adverbs and variability in Kaqchikel agent focus: A reply to Erlewine (2016). *Natural Language and Linguistic Theory*.
- Hoekstra, Teun. 1984. *Transitivity: Grammatical relations in government-binding theory*. Dordrecht, Holland: Foris Publications.
- van Hout, Angeliek. 2004. Unaccusativity as telicity checking. In *The unaccusativity puzzle:* Explorations of the syntax-lexicon interface, ed. Artemis Alexiadou, Elena Anagnostopoulou, and Martin Evereart, 60–83. Oxford: Oxford University Press.
- Imanishi, Yusuke. 2014. Default ergative. Doctoral Dissertation, MIT.
- Imanishi, Yusuke. 2017. Derived ergative in Ixil. In *Proceedings of the 34th West Coast Conference on Formal Linguistics*, ed. Aaron Kaplan and et al, 259–266. Somerville, MA: Cascadilla Proceedings Project.
- Jenks, Peter, and Hannah Sande. To appear. Dependent accusative case and caselessness in Moro. In *Proceedings of NELS 47*, ed. Andrew Lamont and Katerina Tetzloff. Amherst, MA: GLSA.
- Johannessen, Janne Bondi. 1998. Coordination. Oxford University Press.
- Johns, Alana. 1992. Deriving ergativity. *Linguistic Inquiry* 23:57–88.
- Johns, Alana. 2000. Ergativity: a perspective on recent work. In *The first Glot International state-of-the-article book*, ed. Lisa L.-S. Cheng and Rint Sybesma, 47–73. New York: Mouton de Gruyter.
- Johnson, Kyle. 1991. Object positions. *Natural Language and Linguistic Theory* 9:577–636.
- Johnson, Kyle. 2007. In search of phases. In *Phrasal and clausal architecture*, ed. S. Karimi, V. Samiian, and W. Wilkins, 146–166. John Benjamins.
- Keine, Stefan. 2016. Probes and their horizons. Doctoral Dissertation, University of Massachusetts Amherst.
- Kratzer, Angelika. 1996. Severing the external argument from its verb. In *Phrase structure and the lexicon*, ed. Johan Rooryck and Laurie Zaring, 109–137. Dordrecht, The Netherlands: Kluwer Academic Publishers.

- Legate, Julie Anne. 2003. Some interface properties of the phase. *Linguistic Inquiry* 34:506–516.
- Legate, Julie Anne. 2008. Morphological and abstract case. Linguistic Inquiry 39:55–101.
- Legate, Julie Anne. 2012. Types of ergativity. *Lingua* 122:181–191.
- Levin, Beth. 1983. On the nature of ergativity. Doctoral Dissertation, MIT.
- Levin, Beth, and Malka Rappaport-Hovav. 1995. *Unaccusativity*. Cambridge, Massachusetts: MIT Press.
- Levin, Theodore. 2017. Successive-cyclic case assignment: Korean nominative-nominative case-stacking. *Natural Language and Linguistic Theory* 35:447–498.
- Levin, Theodore, and Omer Preminger. 2015. Case in Sakha: Are two modalities really necessary? *Natural Language and Linguistic Theory* 33:231–250.
- Loriot, James, Erwin Lauriault, and Dwight Day. 1993. *Diccionario Shipibo-Castellano*. Yarinacocha, Peru: Instituto Lingüístico de Verano.
- Marantz, Alec. 1991. Case and licensing. In *Eastern States Conference on Linguistics*, ed. Germán Westphal, Benjamin Ao, and Hee-Rahk Chae, 234–253. Cornell University, Ithaca, NY: Cornell Linguistics Club.
- Massam, Diane. 1998. Instrumental *aki* and the nature of Niuean transitivity. *Oceanic Linguistics* 37:12–28.
- Massam, Diane. 2006. Neither absolutive nor ergative is nominative or accusative. In *Ergativity: emerging issues*, ed. Alana Johns, Diane Massam, and Juvénal Ndayiragije, 27–46. Kluwer.
- Massam, Diane. 2015. Applicatives as secondary predicates. In *The Proceedings of AFLA 21*, ed. Amber Camp, Yuko Otsuka, Claire Stabile, and Nozomi Tanaka, 185–199. Asia-Pacific Linguistics.
- Müller, Gereon. 1996. A constraint on remnant movement. *Natural Language and Linguistic Theory* 14:355–407.
- Myler, Neil. 2013. On coming the pub in the North West of England: accusative unaccusatives, dependent case, and preposition incorporation. *Journal of Comparative Germanic Linguistics* 16:189–207.
- Nelson, Katherine. 2013. An acoustic analysis and cross-linguistic study of the phonemic inventory of Nez Perce. Doctoral Dissertation, Rice University.
- Nevins, Andrew. 2011. Multiple agree with clitics: person complementarity vs. omnivorous number. *Natural Language and Linguistic Theory* 29:939–971.
- Newell, Heather. 2008. Aspects of the morphology and phonology of phases. Doctoral Dissertation, McGill University.
- Nissenbaum, Jon. 2000. Investigations of covert phrase movement. Doctoral Dissertation, MIT.
- Otsuka, Yuko. 2006. Syntactic ergativity in Tongan: resumptive pronouns revisited. In *Ergativity: emerging issues*, ed. Alana Johns, Diane Massam, and Juvénal Ndayiragije. Springer.
- Paul, Ileana, and Lisa Travis. 2006. Ergativity in Austronesian languages: what it can do, what it can't, but not why. In *Ergativity: emerging issues*, ed. Alana Johns, Diane Massam, and Juvénal Ndayiragije.
- Polinsky, Maria. 2016. Deconstructing ergativity: Two types of ergative languages and their

- features. Oxford University Press.
- Poole, Ethan. 2015. A configurational account of Finnish case. In *U. Penn Working Papers in Linguistics*, volume 21.
- Preminger, Omer. 2014. Agreement and its failures. Cambridge, Mass: MIT Press.
- Preminger, Omer, and Jaklin Kornfilt. 2015. Nominative as no case at all: an argument from raising-to-accusative in Sakha. In *Proceedings of the 9th Workshop on Altaic Formal Linguistics* (WAFL 9), ed. Andrew Joseph and Esra Predolac. MITWPL.
- Pylkkänen, Liina. 2008. Introducing arguments. Cambridge, Mass: MIT Press.
- Rackowski, Andrea, and Norvin Richards. 2005. Phase edge and extraction: A Tagalog case study. *Linguistic Inquiry* 36:565–599.
- Rezac, Milan, Pablo Albizu, and Ricardo Etxepare. 2014. The structural ergative of Basque and the theory of Case. *Natural Language and Linguistic Theory* 32:1273–1330.
- Richards, Marc, and Theresa Biberauer. 2005. Explaining Expl. In *The function of function words and functional categories*, ed. Marcel den Dikken, 115–153. John Benjamins.
- Rosen, Carol G. 1984. The interface between semantic roles and initial grammatical relations. In *Studies in relational grammar 2*, ed. David M. Perlmutter and Carol G. Rosen, 38–77. University of Chicago Press.
- Rude, Noel. 1985. Studies in Nez Perce grammar and discourse. Doctoral Dissertation, University of Oregon.
- Rude, Noel. 1986. Topicality, transitivity, and the direct object in Nez Perce. *International Journal of American Linguistics* 52:124–153.
- Rude, Noel. 1992. Word order and topicality in Nez Perce. In *Pragmatics of word order flexibility*, ed. D. Payne, 193–208. Amsterdam: John Benjamins.
- Sauerland, Uli. 2003. Intermediate adjunction with A-movement. *Linguistic Inquiry* 34:308–314.
- Schütze, Carson T. 2001. On the nature of default case. *Syntax* 4:205–238.
- Travis, Lisa deMena. 2010. Inner aspect. Dordrecht: Springer.
- van Urk, Coppe, and Norvin Richards. 2015. Two components of long-distance extraction: Successive cyclicity in Dinka. *Linguistic Inquiry* 46:113–155.
- Valenzuela, Pilar M. 2003. Transitivity in Shipibo-Konibo grammar. Doctoral Dissertation, University of Oregon.
- Valenzuela, Pilar M. 2010. Ergativity in Shipibo-Konibo, a Panoan language of the Ucayali. In *Ergativity in Amazonia*, ed. Spike Gildea and Francesc Queixalos, 65–96. John Benjamins.
- Wiltschko, Martina. 2006. On "ergativity" in Halkomelem Salish (and how to split and derive it). In *Ergativity: emerging issues*, ed. A. Johns, D. Massam, and J. Ndayiragije. Springer.
- Wood, Jim. To appear. The accusative subject generalization. Syntax.
- Woolford, Ellen. 1997. Four-way case systems: Ergative, nominative, objective and accusative. *Natural Language and Linguistic Theory* 15:181–227.
- Woolford, Ellen. 2006. Lexical case, inherent case, and argument structure. *Linguistic Inquiry* 37:111–130.
- Yip, Moira, Joan Maling, and Ray Jackendoff. 1987. Case in tiers. *Language* 63:217–250.