

On Dependent Ergative Case (in Shipibo) and Its Derivation by Phase

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Focusing on the Shipibo language, I defend a simple “dependent case” theory of ergative case marking, where ergative case is assigned to the higher of two NPs in a clausal domain. I show how apparent failures of this rule can be explained assuming that VP is a Spell-Out domain distinct from the clause, and that this bleeds ergative case assignment for c-command relationships that already exist in VP and are unchanged in CP. This accounts for the apparent underapplication of ergative case marking with ditransitives, reciprocals, and dyadic experiencer verbs, as opposed to the applicatives of unaccusative verbs, which do have ergative subjects. Finally, I show how case assignment interacts with restructuring to explain constructions in which ergative case appears to be optional.

Keywords: ergativity, Shipibo-Konibo, case assignment, Spell-Out, phases, restructuring

1 Introduction

It is well-known that there are two reasonably common systems of structural case assignment that languages of the world use to represent grammatical functions in clauses: the accusative system and the ergative system. The examples in (1) show a typical accusative pattern in Cuzco Quechua, where a distinctive case affix (*-ta*) is used on the object of a transitive sentence, but not on the subject of a transitive or intransitive sentence.¹

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¹ Abbreviations used in the glosses of examples include ABS, absolutive; ACC, accusative; APPL, applicative; AUX, auxiliary; CAUS, causative; COM, comitative; DAT, dative; DEC, declarative; DS, different subject; ERG, ergative; GEN, genitive; HAB, habitual; IMPF, imperfective; INF, infinitive; INST, instrumental; INTR, intransitive; LOC, locative; NEG, negation; NF,

- (1) a. Kunan p'unchaw Juan qulqi-ta maska-n.
 today Juan money-ACC seek-3S
 'Juan is looking for money today.'
 (Liliana Sanchez, pers. comm.)
- b. Xwan llank'a-n.
 Juan work-3S
 'Juan works.'
 (Lefebvre and Muysken 1988:33)

In contrast, (2) shows a typical ergative pattern in Shipibo (also called Shipibo-Konibo), a language of the Panoan family, spoken in the Amazonian region of Peru. Like Quechua, Shipibo is predominantly an SOV language, with a fair amount of word order freedom. But in Shipibo, a distinctive case affix *-nin* is used on the subject of a transitive clause, not on the object of the transitive sentence or the subject of an intransitive sentence (PV:322–326, LLD:33–34, 40–41).

- (2) a. Maria-nin-ra ochiti noko-ke.
 Maria-ERG-PRT dog find-PRF
 'Maria found the dog.'
- b. Maria-ra ka-ke.
 Maria-PRT GO-PRF
 'Maria went.'

It has been an ongoing challenge for generative theories of case assignment to offer a good account of the ergative case system—one that treats it on a par with accusative systems within the same conceptual framework. (See Ura 2001 for a succinct statement of the issue and some efforts to solve it up through the early Minimalist Program. See also Butt 2006:chap. 6.)

1.1 *The Idea of Dependent Case Assignment*

One proposal that accounts for the ergative case system with attractive simplicity and symmetry is Marantz's (1991) notion of *dependent case* assignment. His basic idea can be stated as follows:

- (3) If there are two distinct NPs in the same clause ("governed by V + I"), then:
 Mark the lower one with dependent case (accusative) *and/or*
 Mark the higher one with dependent case (ergative).
 Otherwise, mark an NP with unmarked/default case (called nominative or absolutive).

nonfeminine; NOM, nominative; o = s, object = subject switch-reference marker; PAST, past; PL, plural; PRES, present; PRF, perfective; PRT, second position particle (an evidential); PTPL, participle; Q, question particle; RECIP, reciprocal; SG, singular; SR, switch-reference; SS, same subject; TR, transitive; VBZR, verbalizer. Agreement markers are glossed with (up to) three symbols: a number indicating person (1, 2, 3), a lowercase letter indicating number (s, p), and an uppercase letter for the grammatical function agreed with (S, O). Abbreviations for sources are B&V, for Baker and Vinokurova 2010; LLD, for Lloriot, Lauriault, and Day 1993; PV, for Valenzuela 2003.

Unless otherwise stated, Shipibo examples come from my own fieldwork.

Whereas for Chomsky (2000, 2001) structural case is primarily a relationship between a functional head and a nearby NP in the same domain, for Marantz (one kind of) structural case is what happens when two NPs are in the same domain (see also Bobaljik 2008; Comrie (1981:118–119) presents a similar idea in functionalist terms). Baker and Vinokurova (2010) (B&V) provide a detailed study of case assignment in the Sakha language (Turkic) along these lines. In particular, they argue for the slightly more precise and contemporary version of (3) given in (4).

- (4) If there are two distinct argumental NPs in the same phase such that NP₁ c-commands NP₂, then value the case feature of NP₂ as accusative unless NP₁ has already been marked for case.
(B&V:595)

Perhaps the most important development between (3) and (4) is that whereas Marantz had in mind a clause as a domain, Baker and Vinokurova use the current notion of phase. This proves to be a key idea below.

The statement for ergative case assignment that is parallel to (4) is given in (5).

- (5) 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.

Putting aside for the time being the possibility of vP being a phase distinct from CP, (5) provides an immediate account of the simple data in (2). No ergative is assigned in an intransitive sentence like (2b), since there is only one NP in the structure. In contrast, ergative is assigned to the subject of a transitive sentence in (2a) because it c-commands the object—both from its original θ -position, Spec,vP, and in its final licensing position, Spec,IP.

- (6) [_{IP} Maria → ERG [_{vP} ~~Maria~~] [_{vP} dog find] v] PRF (See (2a))

This article offers one of the first full-scale studies of an ergative language built on the idea that ergative is a simple structural dependent case in this sense.²

1.2 Alternatives to Dependent Case Assignment

The dependent case idea stands in contrast to two other views about case assignment in general and ergative in particular that have been more influential in the literature: the idea that ergative case is assigned by a functional head under agreement, and the idea that ergative is an inherent case. Let us briefly consider these two alternatives, to see where the crucial issues lie.

² Bittner and Hale (1996a,b) offer sophisticated analyses of several ergative languages—Greenlandic, Warlpiri, and Samoan—in a framework that includes “case competition” as one of its leading ideas, and their work helped bring Marantz 1991 to my attention. But theirs is not a pure dependent case account, in that government by particular functional heads also plays an important role. Their theory is too intricate to give an effective review of here, but I assume that if ergative case patterns can be explained more simply, as in (5), that is desirable. See Massam 2006 and Legate 2008 for some specific discussion of Bittner and Hale’s approach.

A favored way of handling case assignment in recent years has been by linking it to agreement: a functional head X assigns its distinctive brand of case to NP Y if and only if X enters into an Agree relationship with Y (Chomsky 2000, 2001). This seems to work well in many accusative languages, at least for first-order phenomena. For example, the finite verb in Cuzco Quechua agrees in the same way with both transitive and intransitive subjects (*-n* for third person in (1a) and (1b)), but in a different way (if at all) with transitive objects. This fact about agreement could be integrally related to the fact that the two sorts of subjects bear the same case and the object bears a different one. A class of theories thus sought to identify which functional heads assign which structural cases to which NPs and why in ergative languages. This line of attack was especially prevalent in early Minimalist works, including Campana 1992, Murasugi 1992, and Bobaljik 1993, and continued in Ura 2000 and Otsuka 2006.

However, it has become increasingly clear that the comfortable relationship between case and agreement that may exist in some accusative languages (but see Baker 2012a on Amharic) is missing in many ergative languages. Shipibo, for example, has very limited agreement, and the agreement that it does have correlates with grammatical function and structural position, not with morphological case. Its one agreement marker is *-kan*, indicating (optionally) that the subject of the verb is plural. Both the ergative subjects of transitive verbs and the absolutive subjects of intransitive verbs trigger this agreement, but the absolutive object of the transitive verb does not.

- (7) a. Ochiti-baon-ra bake natex-kan-ke.
 dog-PL.ERG-PRT child bite-pS-PRF
 ‘The dogs bit the child.’
 b. Joni-bo-ra mawa-kan-ke.
 person-PL-PRT die-pS-PRF
 ‘The people died.’
 c. Ochiti-nin-ra bake-bo natex-(*kan)-ke.
 dog-ERG-PRT child-PL bite-(*pS)-PRF
 ‘The dog bit the children.’
 (See also PV:521–522)

Overt case and overt agreement are thus not closely correlated in this ergative language. And of the two, it is agreement that patterns the way that the base theory would expect. It works fine to say that *-kan* is the result of some T-like functional head high in the clause that agrees with the closest NP: that is, ‘dogs’ in (7a) under an analysis like (6), and ‘people’ in (7b) but not ‘children’ in (7c).³ But this agreement clearly does not determine whether the agreed-with NP is ergative

³ Given that *-kan* shows agreement in number only and is used optionally, an anonymous reviewer suggests that it may represent aspect-related semantic pluractionality, not structurally determined agreement. I agree that this possibility needs to be considered, but Valenzuela’s (2003) study gives no reason to suspect that it is true. She says explicitly that *-kan* “indicates that the S [intransitive subject] or A [transitive subject] argument of the clause is plural” (p. 521), and the many examples in her work are consistent with this. A computer search of chapters 1–10 of her work yielded 143 instances of *-kan*, of which 117 go with a plural subject, 26 go with a null indefinite subject, and 0 express multiple actions done by a singular subject. The affix *-kan* also shows plurality of the argument in Spec,IP in special structures with experiencer or theme subjects, as discussed in sections 4.2 and 4.3.

or absolutive. Moreover, in ergative languages that are richer in agreement than Shipibo, the mismatch between agreement and case marking is all the more striking: see, for example, Marantz 1991 on Georgian, Baker 2008 on Burushaski, Legate 2008 on Warlpiri and Enga, and Bobaljik 2008 on Nepali. Furthermore, most agreement-based theories of ergative case marking involved covert movements no longer deemed attractive and well-motivated: for example, that of the absolutive object to a high nominative-assigning position (Murasugi 1992, Ura 2000) or of the absolutive subject to a low accusative-assigning position (Bobaljik 1993). As a result, there have been few new attempts along these lines in recent years.

Rather, the most influential view in the current literature on ergativity has been to say that ergative is an inherent case, not a structural one: see Nash 1996, Woolford 1997, 2006, Aldridge 2004, 2008, 2012, Anand and Nevins 2006, Laka 2006b, Legate 2006, 2008, 2012, Massam 2006, and Mahajan 2012, among others. As such, ergative case is attributed to the lexical properties of the agentive *v* head that θ -marks the subject, not to the subject's surface-structural position or to agreement with non- θ -marking functional heads. While this view might have advantages for languages like Basque, Hindi, and Georgian, it does not seem right for a strict ergative language like Shipibo. Without further qualifications,⁴ the inherent case view expects ergative case on the subjects of unergative verbs as well as on the subjects of transitive verbs, but not on the subjects of unaccusatives. This derives a so-called active or split-S pattern, not a true ergative pattern. This split-S pattern is indeed found (under certain conditions) in Basque, Hindi, and Georgian. But in Shipibo (among others), the subjects of both verb classes are absolutive in simple clauses, even though the subjects in (8a) are agents and hence θ -marked by *v* and the subjects in (8b) are themes θ -marked by *V*.

- (8) a. i. Joni-bo-ra teet-ai.
 person-PL-PRT work-IMPF
 'The people are working.'
- ii. Rosa-ra bewa-ke.
 Rosa-PRT sing-PRF
 'Rosa sang.'
- b. i. Kokoti-ra joshin-ke.
 fruit-PRT ripen-PRF
 'The fruit ripened.'
- ii. Maria-ra mawa-ke.
 Maria-PRT die-PRF
 'Maria died.'
- (See also PV:336–337)

⁴ Some researchers, including Massam (2006), Woolford (2006:119–120), and Legate (2012:182), do acknowledge in passing that one needs a transitivity condition as well as a thematic condition on ergative (and dative) case assignment by *v* in many languages, but the true nature of this condition is not investigated. I take this to be a failure to attend to the important role of dependent case assignment within an overall case theory.

Furthermore, the subjects of both verb classes are ergative in applicative constructions, where the verb bears the applicative affix *-xon* and a second NP expresses a person affected by the event.

- (9) a. *Joni-baon-ra Rosa tee-xon-ai.* (See also (44b))
 they-PL.ERG-PRT Rosa work-APPL-IMPF
 ‘They work for Rosa.’
 (See also PV:689–690)
- b. *Bimi-n-ra Rosa joshin-xon-ke. (*bimi-ra)* (See also (45))
 fruit-ERG-PRT Rosa ripen-APPL-PRF (*fruit-PRT)
 ‘The fruit ripened for Rosa.’
 (See also PV:691, 694)

This suggests that what θ -role an NP has—agent or theme—and what head it gets its θ -role from—*v* or *V*—are not primary determinants of its case in Shipibo. This in turn implies that ergative case is not an inherent case in Shipibo.⁵ In contrast, the dependent case hypothesis in (5) has obvious potential to explain these data: the clauses in (8) have only one NP, so (5) does not apply and that NP has default (absolutive) case; the clauses in (9) have two NPs, so (5) does apply to give one of them (the higher one) ergative case.

The applicative of the unaccusative in (9b) is especially significant. Legate (2012:183) brings out clearly an important prediction of inherent theories of ergative case. She writes that “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 an unaccusative verb. If the [ergative-as-inherent theory] holds, the subject of such verbs would not bear ergative case, despite the presence of two DP arguments.” I claim that (9b) is just such an example in Shipibo, and it shows that the prediction of the inherent ergative approach fails, while that of the dependent ergative approach succeeds.

But not everything falls into place immediately for the dependent case hypothesis, such that this can be a very short article. Legate mentions not only applicatives of unaccusative verbs but also passives of ditransitive verbs as crucial test cases. Shipibo does not have a passive voice *per se*, but it does have a reciprocal voice that has a similar effect of reducing the number of overt NPs in the clause. When one detransitivizes a ditransitive verb in this way, the result is a clause with two absolutive NPs and no ergative NP, as shown in (10).

- (10) *Ja-bo-ra piti meni-anan-ke.*
 they-PL-PRT fish give-RECIP-PRF
 ‘They gave fish to each other.’ (lit. ‘They were reciprocally given fish.’)
 (See also PV:811–813)

⁵ I have been alerted to this sort of consideration in part by Jonathan Bobaljik, through passing remarks and his unpublished work (e.g., Bobaljik 2007). See section 4.3 for details.

I do, however, accept that ‘ergative’ may be an inherent case determined by semantic and lexical factors as much as structural ones in certain languages, including Basque (e.g., Preminger 2012) and Georgian and Hindi-Urdu (e.g., Butt and King 2003, Mahajan 2012). Not everything that bears the same label in descriptive studies needs to have the same theoretical analysis.

Therefore, (10) seems to support the ergative-as-inherent-case theory, whereas (9) supports the ergative-as-dependent-case theory. We thus need to get to the bottom of this difference. And (10) is part of a larger picture. Shipibo also has approximately 6–10 seemingly transitive verbs that nevertheless have an absolutive subject as well as an absolutive object; one is given in (11).

- (11) Jose-ra yapa keen-ai.
 José-PRT fish want-IMPF
 ‘José wants some fish.’
 (See also PV:339, 342–344; LLD:34)

Shipibo also has a desiderative construction in which the verb bears the suffix *-kas* ‘want’, and the subject of a transitive verb is described as being optionally absolutive or ergative.

- (12) E-a-ra/E-n-ra yapa pi-kas-ai.
 I-ABS-PRT/I-ERG-PRT fish eat-want-IMPF
 ‘I want to eat fish.’
 (See also PV:367–368)

These three constructions are a challenge to the simple rule of dependent ergative case in (5).

Despite these data, I argue that a simple rule of dependent case can be maintained in its pristine form. I show that the apparent exceptions in (10)–(12) all have relevant differences in structure from ordinary transitive clauses like (2a) or (7a). Once these structural differences are clarified, together with how the ergative rule applies to those structures, all works as it should. Along the way, I support the claim that (9b) stands as a success for the dependent case theory over an inherent case theory. However, the double absolutive examples in (10)–(12) also tell us something important and general about how dependent case is assigned: it is assigned by phases. More specifically, ergative case is assigned when the complement of a C head is spelled out, but not when the complement of a v head is spelled out. This provides a valuable refinement of our understanding of how derivation by phases relates to case theory, or so I argue.

2 Background on Ergative Case in Shipibo

Previous studies on the Shipibo-Konibo language in English include the grammar sketch by Lorient, Lauriault, and Day (1993) and Valenzuela’s (2003) thorough and excellent descriptive grammar, without which my work on this language would not have been possible. In addition, Camacho (2010) provides a generative study of clause chaining in Shipibo, which involves switch-reference (SR) marking and case agreement.

I focus on Shipibo in this article for several reasons. First, it is a canonical ergative language with relatively uniform case marking; it is *not* a split ergative language in any of the familiar ways. Second, it is new to the generative literature on ergativity and thus expands the empirical basis of this literature. Third, it is rich in processes that manipulate transitivity (applicatives and causatives) and that reflect transitivity (SR, agreement on adverbs, etc.), giving us some good resources for testing hypotheses. Fourth, I had the opportunity to make a field trip to Peru to collect data that confirm and supplement the descriptive literature on these matters.

2.1 Morphological Properties of Ergative Case

The ergative case marker in Shipibo has several allomorphs, all of which contain the segment *-n*. On two- (or four-) syllable nouns ending in a light syllable, it is realized as nasalization on the final vowel plus shift of stress to that vowel. Other allomorphs of the ergative include *-nin* after noun roots with three syllables, *-kan* after disyllabic nouns that end with a stressed syllable, *-man* after a nasalized vowel, and *-Vn* after a noun that ends with /x/, /s/, or /sh/ (LLD:39; see also PV:118–126). Beyond these phonological considerations, there are no significant declension classes. Ergative contrasts with absolutive, which is unmarked on most nouns—although there is an exponent of absolutive (*-a*) on some pronouns (see (12)). For nominals ending in the plural morpheme *-bo*, the ergative form ends in *-baon*, with diphthongization of the vowel as well as nasalization; this can be seen in (7a) and (9a) (see also PV:124).

As in many other languages, ergative in Shipibo is morphologically related to other cases (LLD:41–42, PV:225–226). As in Inuit and other languages (Dixon 1994:57), genitive case on a possessor in NP is usually homophonous with ergative in Shipibo: both are *-n* or one of its allomorphs, as in (13).

- (13) Cesar-*nin*-ra [Maria-*nin* wai] rera-ke machito-*nin*.
 Cesar-ERG-PRT Maria-GEN field fell.tree-PRF machete-INST
 ‘Cesar cleared Maria’s field with a machete.’
 (PV:324)

There could be a generalization of dependent case marking to the DP domain at work here: the possessor NP c-commands the possessed NP inside the larger DP, and therefore receives dependent case (Baker, in progress). Ergative is also homophonous with an oblique case marker used on some PP-like phrases, including instruments and some locatives; (13) has an example of an instrument. This homophony is also found in Australian languages (see, e.g., Austin 1981: 117–123, Dixon 1994:57), among others. Valenzuela (2003) treats this as a different case, glossed ‘instrumental’ in (13). I assume that these expressions are PPs in the syntax with a null P head that assigns oblique case; oblique case is then spelled out with the same morphemes as ergative at PF.⁶ These other uses of so-called ergative case are put aside here.

2.2 The Uniformity of Ergative Case Marking in Shipibo

It has become common to observe that most ergative languages are “split ergative” languages to some degree or another, with nonergative patterns appearing alongside ergative ones. It is worth bearing in mind that this is not true for Shipibo. Apart from the very limited exceptions in (10)–(12), ergative marking is notably regular and uniform. Valenzuela (2003:322) observes, “Unlike what

⁶ Austin (1981:117) says that ergative subjects can be distinguished grammatically from similar-looking instrumental NPs in Diyari in that ergative subjects are like the absolutive subjects of intransitive verbs in controlling SR marking, whereas instruments are not. SR marking in Shipibo is also sensitive to ergative subjects but not to instrumental or locative phrases. Moreover, plural marking *-kan* on the verb agrees with an ergative subject (see (7a)) but not with an instrumental or locative adjunct. These differences follow from the assumption that instruments and locatives but not subjects are embedded in PP, the PP structure making its complement inaccessible to probing by I or by the SR morphemes.

is most commonly found in languages of this type . . . , it can be said that in S[hipibo-]K[onibo] there are no instances of case-marking splits triggered by the inherent semantics of the noun phrase, tense-aspect modality distinctions, or the syntactic status of the clause'' (she adds a qualification for desideratives and progressives). For example, first and second person pronouns in Shipibo are marked for ergative in the same way third person NPs are, unlike such pronouns in Dyirbal (Dixon 1994:83–87) and some other Australian languages; see (18). Nor does primary aspect affect ergativity in Shipibo.⁷ Like Hindi, Shipibo draws a distinction between imperfective verbs (with suffix *-ai*) and perfective verbs (with suffix *-ke*), but unlike what one finds in Hindi (see Butt and King 2003, among many others), transitive imperfective clauses have ergative subjects just as perfective ones do: compare (2a) with (26b). Nor does definiteness of the object influence the case of the subject in Shipibo the way it does in Eastern Ostyak (see (25)): in Shipibo, one finds ergative subjects both with definite objects and with highly indefinite, arguably nonreferential ones (see (26)).⁸ Word order also has no effect on case marking in Shipibo: in addition to SOV order, OSV order and SVO order are reasonably common in texts, and regardless of the order, the subject is ergative and the object absolutive. In this way, Shipibo differs from Ika or Kanuri, in which ergative is not necessarily used on the subject in basic SOV order, but is used in a marked order like OSV (Baker, to appear). Finally, the animacy or agency of the subject is not an important factor in Shipibo (see, e.g., (9b)). I conclude that ergative case marking in Shipibo is hearteningly uniform—as one would expect given a simple structure-based rule of case assignment like (5).

Nominals in embedded nonfinite clauses also show the same ergative-absolutive case pattern that those in finite clauses do in Shipibo. For example, both sentences in (14) have an infinitival clause as the (oblique) complement of 'want'. Although the embedded clauses are nonfinite, the intransitive one in (14a) has an absolutive subject and the transitive one in (14b) has an ergative subject and two absolutive objects.

- (14) a. E-a-ra keen-ai [mi-a tee-ti-nin].
 I-ABS-PRT want-IMPf you-ABS work-INF-INST
 'I want you to work.'
- b. E-a-ra keen-ai [Jose-kan mi-a piti meni-ti-nin].
 I-ABS-PRT want-IMPf José-ERG you-ABS food give-INF-INST
 'I want José to give you food.'
- (See also PV:439, 488)

I note in passing that data like these are potentially problematic for an Agree-based theory, in which structural case (ergative or absolutive) is the result of entering into an Agree relationship

⁷ By *primary aspect* here, I mean the basic imperfective/perfective distinction encoded by simple affixes on the verb in Shipibo. Shipibo does have a kind of periphrastic progressive construction in which the seemingly transitive subject can be in absolutive case; see the brief discussion of (67a), which claims that these are really biclausal constructions.

⁸ However, predicate nominals do not trigger ergative on the subject of predication in Shipibo, as in other languages. I tentatively take this to be because predicate nominals are not argumental in the sense referred to in (5); see Baker, in progress, for discussion.

with a particular functional head, such as finite I. This potential problem can of course be managed by saying that the case-assigning functional head is something other than finite I (as an anonymous reviewer reminds me). But at least there is lack of positive evidence that could support an Agree-based theory here—evidence parallel to that which Legate (2008:62–63) gives from nonfinite clauses in Warlpiri, for example. (14) is, however, just what one expects given the dependent case idea, according to which the presence of specific functional heads is not crucial to the assignment of the structural cases, whereas the number of NPs present is crucial.

2.3 Apparently Intransitive Verbs with Ergative Subjects

One further detail to address before beginning the inquiry proper is the fact that Shipibo is described as having a small number of intransitive verbs that take ergative subjects. Valenzuela (2003:583–586) discusses three such verbs: *winati* ‘row’, *jonoti* ‘pole’, and *jointi* ‘breathe’.⁹ A typical example of one of these verbs is (15).

- (15) Jose-kan-ra wina-ke.
 JOSÉ-ERG-PRT ROW-PRF
 ‘José rowed.’

On the face of it, such examples are a problem for the dependent case theory of ergative, and might lend support to the idea that ergative is a lexical or inherent case after all. But it is certainly not the whole class of unergative verbs that behave this way in Shipibo (compare (8a) and PV:337–338). My view is that these are just ordinary transitive verbs, but ones where the direct object is usually an empty category. Indeed, Shipibo allows null *pro* objects, and these still trigger ergative case on the subject, as expected, given that (5) does not require that the second NP be overt at PF.

- (16) Nima_i oin-xon-ra, Jose-kan *pro*_i kena-ke.
 Nima see-SS.TR-PRT JOSÉ-ERG call-PRF
 ‘When he saw Nima, José called him.’
 (LLD:56)

In Shipibo, this even extends to null objects that are indefinite, which do not have an antecedent in discourse the way that the null object in (16) does. For example, when a verb like ‘eat’ is used (apparently) intransitively, the subject of such clauses is nevertheless ergative, as in (17).

- (17) No-n-ra moa [e] pi-ke.
 we-ERG-PRT already eat-PRF
 ‘We have eaten already.’
 (PV:412; see also LLD:33)

⁹ Valenzuela puts a fourth verb, *rebesti* ‘die’, in this class. However, *rebesti* is really a transitive verb meaning ‘to reach the end of x’ in other contexts (PV:586, LLD:363). Apparently, then, ‘y reached the end of it’ is an idiom meaning ‘y died’ in Shipibo.

I do not take (17) to be a counterexample to the rule of dependent case assignment in Shipibo any more than (16) is; it just shows that empty categories of all kinds are visible to the rule of dependent case assignment in Shipibo. More specifically, I assume that the null object in (17) is a ‘weak implicit argument’ in the sense of Landau (2010); it differs from the canonical pro object in (16) in having a reduced set of nominal features. However, Shipibo happens to be a language that requires a phrase to have relatively few nominal features to be visible to the rule of dependent case assignment in (5). (This is a point of crosslinguistic variation: see Baker, in progress, for discussion.) With this in mind, I say the same thing for the verbs ‘row’ and ‘breathe’ in Shipibo: they have (weak or strong) implicit objects, the vessel being propelled in the case of ‘row’ (and ‘pole’), the air being taken in in the case of ‘breathe’. Indeed, Valenzuela (2003: 582–584) reports that these verbs accept such objects in elicitation contexts, although they are not found as overt transitives in her texts. I thus assume that these verbs always have objects in the syntax, but those objects often happen to be null, for pragmatic reasons.

Under this analysis, examples like (15) do not count as evidence that ergative case is lexically assigned in Shipibo, I claim. An anonymous reviewer challenges this on the grounds that it is a lexical property of ‘row’ that it takes an object that is (usually) null; hence, it is a lexical property of ‘row’ that its subject is ergative. There is some truth in this, but I claim that it makes an important theoretical difference whether the verb states directly in the lexicon ‘My subject must be ergative’ or whether it states ‘I occur in such-and-such a syntactic structure’ and it follows from that structure that the subject is ergative. The first lexical property is like what is often assumed for verbs that take quirky dative subjects in Icelandic, and it would substantiate claims like Woolford’s (1997, 2006) that ergative case is also lexical/inherent. The second lexical property says that there is nothing exceptional about ergative case assignment per se in (15). This second view also makes the strong additional prediction that sentences like (15) will behave like ordinary transitive clauses in all other respects, whereas the direct lexical stipulation does not predict this. For example, clauses like (15) behave like transitive clauses for purposes of transitivity agreement on SR clauses and adverbs in Shipibo, and both allow applicatives that can only be formed from transitives (PV:583).

Perhaps the most instructive of these transitivity tests is the use of pro-verbs/auxiliaries. Shipibo has two distinct verbs that are used as pro-verbs or auxiliaries in a wide range of constructions: transitive *ati* and intransitive *iti* (PV:600–604). For example, in a short answer to a yes/no question, Shipibo uses just an inflected version of one of these verbs.

- (18) a. Moa-ki mi-n atapa-bo pi-ma? A-kama. (transitive verb:
 already-Q you-ERG hen-PL eat-cause.PTPL do.TR-NEG both ext. and
 ‘Have you fed the chickens?’ ‘No.’ int. arguments)
- b. Moa-ki mi-a wini-a? I-kama. (unergative verb: ext.
 already-Q you-ABS cry-PTPL do.INTR-NEG argument only)
 ‘Have you cried?’ ‘No.’
- c. Moa-ki mi-a paket-a? I-kama. (unaccusative verb: int.
 already-Q you-ABS fall-PTPL do.INTR-NEG argument only)
 ‘Have you fallen?’ ‘No.’
- (See also PV:600–601)

The generalization seems to be one that relates to argument structure, not to mere surface marking: *ati* is used when the antecedent verb takes both an external argument and an internal argument; *iti* is used otherwise. (We will see more evidence for this generalization in section 4.3.) It is striking, then, that ‘row’ and ‘breathe’ are consistently paired with *ati* rather than *iti* in these contexts, as shown in (19); this contrasts with ordinary unergatives like (18b).

- (19) Minki wina-a? A-kama. (*I-kama)
 you-ERG-Q row-PTPL do.TR-NEG do.INTR-NEG
 ‘Did you row?’ ‘No.’

This is independent evidence that ‘row’ selects an internal argument as well as an external argument. It is this internal argument that triggers ergative case on the external argument, as expected. I conclude that ‘row’, ‘pole’, and ‘breathe’ raise no theoretical issues for a theory of dependent case marking beyond those already raised by normal transitive verbs with null objects.

3 Case in Double Object Constructions

Now we are ready to approach the larger and more theoretically charged class of challenges to the simple dependent case rule: examples with two absolutive NPs but no ergative, like those in (10)–(12). But in order to pursue these cases, let us first consider a preliminary issue that will teach us something important. This concerns double object constructions (DOCs). In Shipibo, both objects of a ditransitive verb are absolutive, and only the subject is ergative. This holds for both ditransitive constructions with morphologically simple verbs and for clauses derived from monotransitive verbs by applicative or causative. (See (44a) for an example with applicative.)

- (20) a. Maria-nin-ra Jose-(*kan) piti meni-ke.
 Maria-ERG-PRT José-(*ERG) fish give-PRF
 ‘Maria gave José fish.’
 (See also PV:346–348 and Torres Bustamante 2011)
- b. Rosa-n-ra koriki e-a/*e-n bichin-ke.
 Rosa-ERG-PRT money me-ABS/*me-ERG take-PRF
 ‘Rosa took money from me.’
- c. Yobe-kan-ra mayan niwe xontako a-ma-ke.
 sorcerer-ERG-PRT whirlwind unmarried.girl do-CAUS-PRF
 ‘The sorcerer caused the whirlwind to harm (lit. do) the unmarried girl.’
 (PV:615)

Such examples show that Shipibo does not have a structural dative case, as Sakha does (B&V).¹⁰ But there is another question to ask, given my assumptions about dependent case: why isn’t the

¹⁰ Shipibo does have what Valenzuela (2003:232) calls a dative, but it is a semantic case—that is, a PP—that expresses the complement of certain psych verbs, corresponding to *at* in English *I am angry at John*. See (38a) for an example.

goal in a DOC ergative, like the subject? The goal does c-command the theme.¹¹ Therefore, as the simple rule is stated in (5), we should expect the goal to be ergative as well as the agent.

We can sharpen this puzzle by comparing Shipibo with a nominative-accusative language in which accusative is a dependent case, such as Korean. In Korean, both objects of a double object construction (if not dative) receive accusative case.

- (21) Cheli-ka [VP Mary-lul panci-lul senmwul-ul hay-ss-ta].
 Cheli-NOM Mary-ACC ring-ACC gift-ACC do-PAST-DEC
 ‘Cheli presented Mary a ring.’
 (Wechsler and Lee 1996:635)

The dependent case theorist wants to say that the intermediate NP ‘Mary’ here gets accusative case because it is c-commanded by the subject ‘Cheli’. But then why doesn’t the intermediate NP ‘José’ in (20a) get ergative, given that it c-commands the theme ‘fish’? Here we seem to have a breakdown in the otherwise robust symmetry between accusative and ergative systems, which is the strength of the dependent case system. And the difference seems to be systematic: like Korean are Amharic (Baker 2012a) and Quechua (Lefebvre and Muysken 1988); like Shipibo are Burushaski (Willson 1996) and Niuean (Massam 2006). Tripartite languages like Diyari also bear witness, in that the goal NP in a DOC is accusative, not ergative (Austin 1981:115).

- (22) nulu pulana niña putu yiqki-ña wara-yi.
 3SGNF.ERG 3dl.ACC 3SGNF.ACC thing give-PTPL AUX-PRES
 ‘He gave them that thing.’

Why is this? Does it undermine the idea of dependent case? Descriptively speaking, we want principles that say “Assign accusative to an NP if *any* other NP c-commands it” but “Assign ergative to an NP if it c-commands *all* the other NPs.” But building these details explicitly into the two case assignment rules in this way is a brute force solution, with no explanatory value.

Here is a way to address this issue in a fashion that aspires to be more principled, making use of the notion of a phase, anticipated in (5) but not taken into account so far. In traditional terms, we call a clause with a verb like ‘give’ a double *object* construction, not a double *subject* construction, even though the goal is between the agent and the theme in terms of c-command. What is the theoretical basis of this intuition? It does not come just from relative c-command;

¹¹ I assume this mostly on universal grounds, since it has been shown for many other languages. Torres Bustamante (2011) also analyzes Shipibo DOCs in this way, although it is harder to show the c-command asymmetry in Shipibo than in some languages, since Shipibo behaves as a “symmetrical object language” (see also PV:chap. 12). One bit of evidence that might support this is that when a ditransitive is put into the reciprocal voice, it is the goal argument of the base verb that is identified with the agent, not the theme argument. Thus, examples of the form ‘x y verb-RECP’ consistently mean ‘x verbed y to/for each other’, not ‘x verbed each other to/for y’ (PV:812; see (32) for examples, but see Torres Bustamante 2011:229 for a partly different view). This fact is explained by the analysis sketched in (33), under the assumption that the goal is higher than the theme. This consideration also suggests that the applied argument of an applicative is higher than the theme (PV:811).

Note that if one believes that the theme c-commands the goal in a DOC instead, the same problem arises in a different form: then the question is why the theme is not ergative in (20).

rather, it comes from the idea that there is an important unit that contains the goal and the theme but not the agent. Traditionally this unit is the (greater) verb phrase. Now the simple idea of a verb phrase per se breaks down somewhat if one assumes that some arguments—agent and goal, perhaps even theme—are introduced by designated verbal heads, like *v* and *Appl*. But a version of the traditional intuition survives in the idea that the verb phrase (in some sense) is a *phase*, an important domain for syntactic derivation (Chomsky 2000, 2001, and related work). Let us hypothesize, then, that the verb phrase can be a distinct domain for case assignment, and let us see how we can relate the difference between (20) and (21) to that.

As mentioned above, Baker and Vinokurova (2010) already assumed that VP is a distinct domain of case assignment in the Sakha language, and hence the accusative rule in (4) makes reference to phases. This had two effects in their account. First, it allowed them to treat some instances of dative as a kind of dependent case: dative is assigned to the higher of two NPs in a VP domain, much as ergative is assigned to the higher of two NPs in a clause. Hence, the goal argument of a DOC is systematically dative in Sakha (not accusative, as in (21) in Korean).

- (23) Min [_{VP} Masha-qa kinige-ni bier-di-m].
 I Masha-DAT book-ACC give-PAST-1sS
 ‘I gave Masha the book.’
 (B&V:602)

This also works to assign dative to the causee of a morphological causative if and only if the base verb is transitive, and to assign dative to the subject of certain nonagentive two-place predicates in Sakha. The second effect of saying that VP is a distinct domain in Sakha is that it allows an account of the language’s differential object marking. A nonspecific indefinite NP that follows an adverb and is adjacent to the verb is not marked accusative in this language, whereas a specific or definite NP that precedes a VP adverb is marked accusative.

- (24) a. Masha [_{VP} türgennik salamaat sie-te].
 Masha quickly porridge eat-PAST.3sS
 ‘Masha ate porridge quickly.’
 b. Masha salamaat-y/*salamaat [_{VP} türgennik — sie-te].
 Masha porridge-ACC/*porridge quickly eat-PAST.3sS
 ‘Masha ate the porridge quickly.’
 (B&V:602)

This follows if VP is a different domain from the clause as a whole. If the object stays in situ, properly inside the VP, then there is only one NP in the VP domain, and only one in the CP domain. Given this, dependent case marking does not apply to either, and both end up in the unmarked case in Sakha (nominative). However, if the object undergoes object shift to the edge of VP or out of VP entirely, then it is visible on the CP phase as well. Then two NPs are present on this phase, and dependent accusative case is assigned to the lower one. There are ergative languages that behave similarly (Baker, to appear): in Eastern Ostyak, for example, the subject is marked ergative if and only if the object is definite, shifting out of VP.

- (25) a. mā [VP t'əkājəylämnä ula mənγäləm].
 we.dl(NOM) younger.sister.COM berry pick.PAST.1pS
 'I went to pick berries with my younger sister.'
- b. mə-ŋən ləγə [VP əllə juγ kanŋa — aməyaloy].
 we-ERG them large tree beside put.PAST.3pO/1pS
 'We put them (pots of berries) beside a big tree.'
 (Gulya 1966:135)

So there are good reasons to say that VP is a domain for case assignment, distinct from CP in some languages—and indeed, this is what the general idea of derivation by phase expects.

Shipibo does not have either of these particular manifestations of there being a smaller subclausal domain: it has no structural dative case in DOCs (see (20)), and ergative case on the subject does not depend on the (position or) interpretation of the object, as shown in (26).

- (26) a. Maria-nin-ra koriki noko-ke.
 Maria-ERG-PRT money find-PRF
 'Maria found (some) money.'
- b. Maria-nin-ra nokon ochiti ben-ai.
 Maria-ERG-PRT my.GEN dog seek-IMPF
 'Maria is looking for my dog.'

Nevertheless, we may entertain the idea that the VP is a domain for case assignment in this language, even though no distinctive cases are assigned there. I propose that the verb phrase phase still has an effect on case assignment, in that it inhibits the assignment of dependent ergative case to NPs inside the verb phrase, an assignment that might otherwise take place.

This proposal can be developed in terms of the following theoretical assumptions:¹²

- (27) a. C and v are phase heads.
 b. Their complements (IP, VP) are Spell-Out domains.
 c. Spell-Out involves mapping relevant c-command relations onto linear order statements, *case assignments*, and so on.
 d. CP is always a "hard phase": its complement is invisible for later operations.
 e. vP may be a "hard phase" or a "soft phase." If it is soft, the contents of its complement do remain visible in the next stage of derivation, but only new c-command relationships are considered at later Spell-Outs.

¹² This set of assumptions differs from Baker and Vinokurova's (2010). Baker and Vinokurova assumed that dependent case was assigned in the course of the syntactic derivation proper, as soon as a relevant configuration was created. In addition to addressing the problem of dependent case in DOCs, the assumptions in (27) are more standard in that v is the phase head, not V as in B&V. The potential cost is that a different account is needed for why scrambling (or whatever creates free word order in the clause) does not affect dependent case assignment. One such account would stipulate or derive the generalization that whenever NP₁ \bar{A} -moves past NP₂, it leaves the smallest Spell-Out domain that contains both NP₁ and NP₂. Thus, the object scrambles past the goal only if it leaves VP where dative is assigned, and it scrambles past the subject only if it leaves IP where ergative and accusative are assigned. See Baker, in progress, for more on this issue.

Of these assumptions, (27a,b,d) are standard parts of the theory of phases. (27c) is also reasonably standard with regard to word order after Chomsky's (1995) reinterpretation of Kayne's (1994) antisymmetry system, but it adds that these *c*-command pairs also determine the case marking of the NPs involved. This seems like a plausible way to fit dependent case marking into the derivation, along with word order, at the interface of the syntax proper and PF.¹³ (27e) is the most novel of this set of assumptions; we will see directly what important work it does.

Given these assumptions, consider a schematic DOC in both an ergative language like Shipibo and an accusative language like Korean. The derivation unfolds as in (28) (where *c-c* = *c-command*).

- (28) a. [_{VP} NP₂ NP₃ V]
 b. [_{VP} NP₁ v [_{VP} NP₂ NP₃ V]], v a phase head
 Spell out v's complement: NP₂ *c-c*'s NP₃ → NP₂ < NP₃
 → Case NP₂ = 0; Case NP₃ = 0
 c. [_{CP} C [_{TP} NP₁ I [_{VP} — v [_{VP} NP₂ NP₃ V]]]], C a phase head
 Spell out C's complement: NP₁ *c-c*'s NP₂ → NP₁ = Erg *and/or* NP₂ = Acc
 NP₁ *c-c*'s NP₃ → NP₁ = Erg *and/or* NP₃ = Acc

First one builds the VP as in (28a); by hypothesis, the goal *c*-commands the theme, but not vice versa. This VP is then merged with a *v* head, as its complement, as in (28b). This *v* is a phase head and causes its complement to be spelled out. (27a) and (27b) thus characterize more precisely what I mean by saying that the “greater verb phrase” is a domain for case assignment: the relevant domain is whatever verbal projection is the complement of the *v* head that (potentially) assigns an agentive θ -role and alternates with the passive voice. This unit could include projections of an applicative head or a causative head in addition to the VP proper. As a result, it does not technically matter whether the goal argument in (28a) is generated as the Spec,VP, as I assume for concreteness, or the Spec of an applicative head, and it is expected that simple ditransitives, causatives, and applicatives all show the same case patterns, as seen in (20) and (44a). When this VP is spelled out, the *c*-command relationship between the NPs contained in VP, NP₂ and NP₃, maps onto NP₂ preceding NP₃ in unmarked word order, after Kayne 1994 (let's assume). At this point, the *c*-command pair is also considered for dependent case. Now let us revise the case assignment rules in (4) and (5), so that ergative and accusative are keyed to the Spell-Out of TP

¹³ One anonymous reviewer expresses some skepticism about rules of dependent case assignment like (4) and (5) on general theoretical grounds, being unsure where they fit into a general model of grammar such as Minimalism. “Where exactly are these statements ‘kept’ in the grammar? Why is case so unlike anything else in grammar?” the reviewer asks. I agree that there is more to think through at this level, but (27) offers the beginning of an answer. On this view, the rules of dependent case assignment have the same status as Kayne's (1994) Linear Correspondence Axiom: they find a home in the theory of how syntactic structure (*c*-command relationships) are transduced into morphological/PF relationships at Spell-Out, Spell-Out happening cyclically by phase.

only, but there are parallel cases, dative and oblique, that are keyed to the Spell-Out of VP. Which of these cases a particular language makes use of varies crosslinguistically.

- (29) a. If NP_x c-commands NP_y at the Spell-Out of VP, value the case feature of NP_x dative.
 (Yes in Sakha, no in Shipibo, Korean, Diyari)
- b. If NP_x c-commands NP_y at the Spell-Out of VP, value the case feature of NP_y oblique.
 (Yes in Chamorro, no in the other languages considered here; Baker, in progress)
- c. If NP_x c-commands NP_y at the Spell-Out of TP, value the case feature of NP_x ergative.
 (Yes in Shipibo and Diyari, no in Korean, Sakha, and Chamorro)
- d. If NP_x c-commands NP_y at the Spell-Out of TP, value the case feature of NP_y accusative.
 (Yes in Korean, Sakha, and Diyari, no in Shipibo and Chamorro)

If (28b) were from Sakha, NP_2 would receive dative by (29a) (see (23)), but Shipibo, Korean, and Diyari do not have structural dative (or oblique), and ergative and accusative do not apply because those cases are keyed to the TP domain in these languages.¹⁴ So although this c-command pair is considered for case, no case is actually assigned in Shipibo, Korean, and Diyari.

The syntactic derivation then continues as in (28c): the agent is added in Spec,vP, I is added, the agent raises to Spec,IP for EPP (Extended Projection Principle) reasons, and so on. Finally, C is added. Since this is another phase head, it triggers Spell-Out of its complement, IP. As part of this Spell-Out, we again consider c-command relationships among the NPs that are present in the representation. According to (27e), in languages where vP is a soft phase, all of the NPs contained in VP are still considered, not just an NP at the edge. But although NP_2 and NP_3 are both still present, the c-command relationship between them is not reconsidered; it is old news, and its implications for word order and case have already been calculated. The new c-command pairs are (NP_1, NP_2) and (NP_1, NP_3) . For word order, this gives $NP_1 < NP_2$ and $NP_1 < NP_3$, in addition to $NP_2 < NP_3$ derived earlier. This is the right order among the NPs in an SOV language. For case assignment, we apply (29c) and/or (29d). In accusative Amharic and tripartite Diyari, (NP_1, NP_2) implies that NP_2 is accusative, and (NP_1, NP_3) implies that NP_3 is accusative.

¹⁴ An anonymous reviewer perceptively asks whether it ever happens that the ergative case is assigned both to the higher NP in a VP and to the higher NP in a TP, resulting in syncretism between dative and ergative. The answer is that this is not common, but it is attested in (at least) Ubykh and Ika. Similarly, we might expect languages in which accusative is assigned both to the lower NP in VP and to the lower NP in TP, giving syncretism between ‘‘oblique’’ and accusative case. Amharic is such a language. See Baker, in progress, for examples and discussion.

Hence, we get two accusative arguments—the correct result. In ergative Shipibo and tripartite Diyari, (NP_1, NP_2) implies that NP_1 is ergative, and (NP_1, NP_3) also implies (redundantly) that NP_1 is ergative. Hence, we get one ergative NP—also the right result. NPs not otherwise case-marked get unmarked case: nominative on the one subject in Korean, and absolutive on the two objects in Shipibo.

The set of assumptions in (27) thus gives us the observed difference in how dependent case marking applies to DOCs in ergative languages as opposed to accusative languages in a principled way. In fact, both ergative and accusative assignment happen twice, but in an ergative language the same NP gets marked ergative both times, whereas in an accusative language each instance of accusative assignment targets a different NP. Meanwhile, the VP domain protects the goal argument from getting ergative in an ergative language at the Spell-Out of TP by something akin to the old Strict Cycle Condition on phonological rule application. No difference is built into the rules of ergative and accusative case; the goal's eligibility for accusative but not ergative emerges from how those rules interact with the fact that VP is a Spell-Out domain that contains the theme and the goal but not the agent.

As already mentioned, the most novel assumption in (27) is that vP can be a soft phase rather than a hard one, with all of its material still visible on the CP cycle. Although this assumption is nonstandard, the evidence for it with respect to case assignment is, I believe, strong. It can be seen quite clearly in an accusative language like Korean. Compare the active ditransitive construction in (21), repeated here as (30a), with the passive version in (30b). What is striking is that all of the objects are accusative in the active version, but none of them are in the passive one, where there is no external argument generated in Spec,vP (Wechsler and Lee 1996:635).

- (30) a. Cheli-ka [_{VP} Mary-lul panci-lul senmwul-ul hay-ss-ta].
 Cheli-NOM Mary-ACC ring-ACC gift-ACC do-PAST-DEC
 ‘Cheli presented Mary a ring.’
 b. [_{VP} Mary-ka panci-ka senmwul-i toy-ess-ta].
 Mary-NOM ring-NOM gift-NOM do.PASS-PAST-DEC
 ‘Mary was presented with a ring.’

(30b) shows that c-command relationships that hold strictly inside VP do not map onto accusative case assignments for the lower NPs in VP. That is expected if accusative is not assigned on the VP cycle in Korean, just as ergative is not in Shipibo (see (29c–d)). If the v node is passive (or unaccusative), then no additional NP is added on the CP cycle, so no new c-command relationships are created. We observe then that accusative does not apply to VP-internal relationships even on the CP cycle: this motivates the ‘‘Strict Cycle Condition’’ aspect of (27e), where preexisting c-command relationships are not reconsidered for dependent case. But if the verb is active, as in (30a), then a new NP is introduced, and with it several new c-command relationships: (NP_1, NP_2) , (NP_1, NP_3) , and (NP_1, NP_4) . As a result, every nominal in the VP becomes accusative in (30a). Crucially, if only an NP on the edge of the vP-VP domain were visible on the CP cycle, then we would expect only that NP to become accusative, the others remaining nominative/unmarked. But in Korean, they all become accusative, in a way that cannot be attributed to the

VP cycle. Therefore, they must all be present on the CP cycle. Therefore, vP in Korean is a soft phase in the way I suggest.

Whether vP is a soft phase or not seems to be parameterized.¹⁵ This assumption enables me to account for the difference between Eastern Ostyak, where ergative marking depends on the position and specificity of the object (see (25)), and Shipibo, where ergative marking does not depend on the position or specificity of the object (see (26)). In Ostyak, only a definite NP moved out of VP counts as a trigger for ergative on the subject, whereas in Shipibo, any NP inside VP counts as a trigger for ergative, regardless of its position or interpretation. Although this is unlike standard phase theory, the difference seems to be well-motivated and uneliminable. Like Shipibo are Burushaski, Lezgian, Diyari, and many other languages; like Ostyak are Ika, Kanuri, and Nez Perce (Baker, to appear, in progress). The difference between soft phases and hard phases is also observable in nominative-accusative languages: it distinguishes differential object marking (DOM) languages like Sakha (see (24)) from languages like Cuzco Quechua (see (31)) and Korean in which even indefinite objects inside the VP are always marked accusative.¹⁶

- (31) Juan [_{VP} wawakuna-man miski-ta qu-npuni].
 Juan children-to candy-ACC give-HAB.3S
 ‘Juan gives candy to the children (habitually).’
 (Liliana Sanchez, pers. comm.)

Thus, this crosslinguistic variation also supports the distinction between soft phases and hard ones, on which my account of case in DOCs depends.¹⁷ Of course, it is also interesting to ask whether the distinction between hard vPs and soft vPs affects any other kinds of derivation—for example, agreement or how movement takes place. But this goes beyond what I can undertake here; for now, I content myself with getting the case right.

4 Dyadic Absolutive-Absolutive Clauses

So far, I have concentrated on the question of why dependent accusative case often applies to the goal argument of a DOC, but dependent ergative case does not. The results of this discussion now give us all of the theoretical tools we need to handle the apparent underapplication of ergative case in some clauses that contain two bare NPs, as seen in (10)–(12).

¹⁵ My distinction between soft and hard vP phases differs in this respect from Chomsky’s (2001:12–13) distinction between weak and strong vP phases. Conceptually speaking, the notions are quite similar: soft phases are like weak phases in that material contained within them remains available for further syntactic computation; hard phases are like strong phases in that it is not. But Chomsky uses *weak* and *strong* to distinguish vPs that assign an external θ -role to Spec,vP (actives) from vPs that do not (passives, unaccusatives) in all languages. In contrast, I use *soft* and *hard* to distinguish vPs (active or passive) in one class of languages from vPs in another class of languages—languages with and without differential case marking, for example.

¹⁶ vP’s being a hard phase is not the only possible source of DOM, however. It can also arise from accusative’s being spelled out on DPs but not on NPs (Amharic; Baker 2012a) or from the ACC feature being deleted in a pseudo-noun incorporation construction (Tamil; Baker 2014).

¹⁷ Two anonymous reviewers would like to see a systematic discussion of the space of parametric possibilities implied by the case parameters in (29) together with the hard/soft distinction in (27e). But for reasons of space, this worthy task must wait for Baker, in progress.

4.1 Reciprocals of Ditransitive Constructions

Consider first the semiproductive way of deriving absolutive-absolutive constructions in Shipibo: namely, adding the reciprocal suffix to a ditransitive construction. Descriptively, reciprocal in Shipibo is a valence-reducing voice category (PV:chap. 18): it makes intransitive constructions with one NP out of transitive constructions, and dyadic constructions with two NPs out of ditransitive constructions. In the latter case, both NPs are absolutive, and there is no ergative nominal. This is true if the base verb is a simple ditransitive like ‘give x to y’, ‘take x from y’, ‘ask x for y’, or ‘tell x to y’, and if it is a derived ditransitive like a benefactive applicative or a causative.

- (32) a. Ja-bo-ra/?*Ja-baon-ra winti bichin-anan-ai. (See also (10))
 they-PL-PRT/?*they-PL.ERG-PRT oar take-RECIP-IMPF
 ‘They took oars from each other.’
- b. Ja-bo-ra/*Ja-baon-ra kokoti-bo be-xon-an-ai.
 they-PL-PRT/*they-PL.ERG-PRT fruit-PL bring-APPL-RECIP-IMPF
 ‘They brought fruit for each other.’
 (See also PV:811–813)
- c. No-a-ra/?*No-n-ra nami bo-ma-anan-ke.
 we-ABS-PRT/?*we-ERG-PRT meat take-CAUS-RECIP-PRF
 ‘We sent meat to each other.’

These combinations vary in their productivity, but a range of examples are possible, and the ones that are possible consistently have this case pattern.¹⁸ The question for a dependent case theory of ergative then is this: why doesn’t whichever of these NPs c-commands the other one get ergative case?

I claim that the reason why the two arguments of a reciprocalized ditransitive verb get absolutive case is essentially the same as the reason why the two internal arguments of an active ditransitive verb get absolutive case: it is another ‘‘strict cycle’’ effect induced by VP’s being a Spell-Out domain distinct from IP. The derivation for (10) could go roughly as follows. The VP of the reciprocal sentence ‘They give each other fish’ is just the same as that of the active sentence ‘He gave them fish’, with the goal c-commanding the theme, as shown in (33a). Then the reciprocal morpheme is merged with VP as a type of v/Voice head. Since this is a phase head (I assume), the VP undergoes Spell-Out. The pair (‘they’, ‘fish’) is considered for dependent case assignment, but no case is assigned at this stage in Shipibo (see (29a–b)).

- (33) a. [_{VP} they fish give]
 b. [_{VP} they [_{VP} ⟨they⟩ fish give] RECIP]
 c. [_{CP} C [_{IP} they [_{VP} ⟨they⟩ [_{VP} ⟨they⟩ fish give] RECIP] I]]

¹⁸ Valenzuela says that reciprocal is only possible with more frequent/lexicalized applicatives and causatives (PV: 810–813); I did not explore the limits of this. She also says that the middle suffix can sometimes be added to a ditransitive to get a reflexive meaning (PV:785). However, the speakers I worked with mostly did not allow this, so I do not discuss that structure here.

Now what is special about the reciprocal voice, as opposed to active (or passive) voice, is that it equates the external argument that it introduces with the highest internal argument in the VP. For concreteness, I assume that this is done by movement: the reciprocal head probes its VP complement, finds the closest NP, and remerges it in Spec,vP, giving the representation in (33b). (This is an instance of movement to a θ -position, as pioneered by Hornstein (1999) in his movement theory of control.) As a result, ‘they’ is interpreted as the agent of the event as well as having the θ -role associated with its first Merge position—here, goal. This gives the correct meaning for the reciprocal. The derivation then goes on to CP in the usual way to get to (33c). C is a phase head, triggering the Spell-Out of its IP complement. Part of spelling out is determining dependent case assignments. Now, what new c-command relationships are present at IP that were not considered at VP? The answer is that there are none. The higher copy of ‘they’ c-commands the lower copy, but these are not distinct nominals; one link in a chain does not trigger ergative on another link in the same chain (see Marantz 1991:25). ‘They’ in Spec,IP also c-commands ‘fish’ in VP. But the copy of ‘they’ in Spec,VP already c-commanded ‘fish’ when VP was spelled out. It is reasonable to say that this is not a new c-command relationship either—that if NP₁ c-commands NP₂ at point A in a derivation and another copy of NP₁ c-commands NP₂ at point B, this does not count as a new c-command relation for PF. There are thus no new pairs (NP_x, NP_y) such that NP_x c-commands NP_y for the first time at the Spell-Out of IP. Hence, no ergative case is assigned. Only one copy of ‘they’ is spelled out, as is usual for NP chains, and both the overt NPs have default absolutive case, giving (10), and similarly for (32).

This account is based on the fact that, although the subject of the reciprocal verb is the agent of the event, it is also the goal. And we know that theme arguments do not trigger ergative case on goals in Shipibo, as seen in active ditransitives. The trick then is to generalize that result so that the theme argument also does not trigger ergative on the agent + goal argument in the reciprocal. This is what the account in (33) does—although I leave open the possibility that the details of the reciprocal voice could be filled in in other ways to get the same result (see footnote 27).

4.2 Simple Absolutive-Absolutive Verbs

Next consider the morphologically simple verbs that fail to take an ergative subject, even though they are dyadic. These include verbs that mean ‘want’, ‘happen to’, ‘have a child’, ‘forget’, ‘lack’, and ‘sell’ (see PV:339, 342–349, LLD:34). One example was (11); (34) gives two more.

- (34) a. Nokon awin-ra westiora benbo bake-n-ke. (*awin-in-ra)
 my.GEN wife-PRT one male baby-VBZR-PRF wife-ERG-PRT
 ‘My wife gave birth to a baby boy.’
 b. Jose-ra nokon bake shinan-beno-ke.
 José-PRT my.GEN child think-forget-PRF
 ‘José forgot my child.’

It is notable that these verbs do not have agentive subjects; rather, the subject is consistently an experiencer or a source argument. Given this, I suggest that these are verbs that intrinsically take two internal arguments but no external argument—in other words, two arguments in the comple-

ment of the phase head *v* (VP or possibly ApplP), and no argument in Spec,vP. They are to ditransitive verbs as normal unaccusative verbs are to simple transitive verbs; we can call them *dyadic unaccusatives*. This is the view defended for certain psych verbs in Italian by Belletti and Rizzi (1988), and others in that tradition.

Given this hypothesis about the syntactic structures that these verbs appear in, they have two absolutive arguments and no ergative argument for the same reason that active ditransitives and reciprocals of ditransitives have two absolutive arguments. First, one forms a VP. By hypothesis, both arguments are projected in this VP, giving a structure like [_{VP} José fish want] for (11). This VP then merges with a phonologically null *v*, but an inactive one that does not assign a θ -role. This *v* triggers the Spell-Out of VP,¹⁹ and the *c*-command pair (José, fish) is considered, but no case is assigned in accordance with Shipibo's case rules (see (29)). No agent is merged in Spec,vP. *I* is merged, and its EPP feature triggers movement of the closest NP to Spec,IP—namely, the experiencer. It is clear that it is the experiencer that counts as the syntactic subject of the construction, because it determines whether the plural agreement marker *-kan* is used or not (see (35)), and it counts as the subject for SR marking (see (36)).

- (35) a. Joni-bo-ra kenti keen-kan-ai. (plural agreement)
 person-PL-PRT pot want-pS-IMPF
 'The people want the pot.'
- b. *Jose-ra ochiti-bo keen-kan-ai. (OK with *keen-ai*)
 José-PRT dog-PL want-pS-IMPF
 'José wants/likes the dogs.'
- (36) a. Saweti oin-ax-a, Rosa ja keen-ai. (switch reference; cf. (40))
 dress see-SS.INTR-PRT Rosa it want-IMPF
 'Seeing the dress, Rosa wanted it.'
- b. *Joshin-ax-a, Rosa bimi keen-ai. (OK with *joshin-ke-tian-ra*)
 ripen-SS.INTR-PRT Rosa fruit want-IMPF ripen-PRF-DS-PRT
 'It having ripened, Rosa liked/wanted the fruit.'

We may infer from these facts, I believe, that the experiencer and not the theme has a special relationship with the high functional heads in the clause (i.e., *I*): either those functional heads enter into an Agree relationship with the experiencer, or the experiencer satisfies their EPP property, or both. This is expected if the experiencer is the higher of the two arguments in the initial VP, as the goal is in a standard DOC; then the experiencer is the closest NP to the high functional heads. The representation of the clause when the CP phase is completed is shown in (37). The only *c*-command relationship here is (José, fish), and that was already present when VP was spelled out.

¹⁹ Note that I assume crucially—following Legate (2003), among others—that all *vs* are phase heads, not only active/agentive ones.

Therefore, ergative case assignment does not apply, and both arguments show up as absolutive.

(37) [C [_{IP} José [_{VP} [_{VP} ⟨José⟩ fish want] v] I]]

Although this analysis comes at very little cost given assumptions that are already in place, it is not entirely obvious how the θ -roles of these verbs relate to those of ditransitives. A tempting alternative could be that a verb like *keenti* ‘want’ has an absolutive subject rather than an ergative one because the lower (theme) argument is covertly an oblique. If so, then the lower argument is in essence a PP rather than an NP, and as such does not trigger ergative on the subject. The subject of *keenti*-class verbs would then be absolutive for the same reason that the subject of a verb with a PP complement is, as shown in (38) (also PV:339–340).

- (38) a. Jose/*Jose-kan ochiti-ki raket-ai. (Psych verb,
 José/*José-ERG dog-DAT fear-IMPF with DAT *-ki* complement)
 ‘José fears the dog.’
- b. Joni-ra nokon ochiti-nin yometso-ke. (Possession verb,
 person-PRT MY.GEN dog-INST steal-PRF with INST complement)
 ‘Someone stole my dog.’

On this alternative, the only difference would be that it is less obvious that the complement of V is a PP in (11) and (34) than it is in (38) because there is no overt exponent of the P at PF. Some encouragement for this view comes from the fact that some verbs of this class can also appear with a complement that is oblique rather than absolutive, with a very similar meaning, as in (39).

- (39) E-a nokon kirika-nin shinan-beno-ke. (cf. (34b))
 I-ABS my.GEN book-INST think-forget-PRF
 ‘I forgot about my book.’
 (See also PV:341–343)

In the (39) version, an absolutive subject is entirely expected. The double absolutive version in (34b) could be taken to be the same syntactically, except that the P is not pronounced.

However, there is empirical evidence against this alternative, coming from the SR system in Shipibo. In sequential (as opposed to simultaneous) embedded clauses, Shipibo draws a three-way distinction. If the subject of the dependent clause is coreferential with the subject of the main clause, then the dependent clause is marked with a ‘‘same subject’’ marker: *-ax* if the main clause has an absolutive subject or *-xon* if it has an ergative subject. If the object of the dependent clause is coreferential with the subject of the main clause, then the dependent clause is marked with the suffix *-a*. If neither the subject nor the object of the dependent clause is coreferential with the subject of the main clause, then the embedded clause bears the aspect suffix *-ke* plus *-tian*, the ‘‘different subject’’ marker (LLD:54–56, PV:chap. 9, Camacho 2010:244; on SR in general, see Finer 1984, Sterling 1993). An illustrative set is (40a–c).

- (40) a. Jose-ra Rosa oin-ax xobo-n ka-ke. (See also (36))
 José-PRT Rosa see-SS.INTR house-LOC go-PRF
 ‘José, he seeing Rosa, went home.’
 b. Jose-kan Rosa oin-a-ra, xobo-n ka-ke.
 José-ERG Rosa see-O=S-PRT house-LOC go-PRF
 ‘When José saw Rosa, she (Rosa) went home.’
 c. Jose-kan Rosa oin-ke-tian-ra, (ja) xobo-n ka-ke.
 José-ERG Rosa see-PRF-DS-PRT he/she home-LOC go-PRF
 ‘When José saw Rosa, he/she (someone else) went home.’

The opportunity that this presents for our purposes comes from the contrast between *-a* and *-tian* as a test for ‘objecthood’ in the dependent clause. It turns out that *-a* is used when any bare NP nonsubject in the subordinate clause is coreferential with the matrix subject. In a ditransitive construction, this can be either the goal argument or the theme argument (see also PV:530, 710–711).

- (41) a. Jose-kan Rosa teoti meni-a-ra, xobo-n ka-ke. (* with *meni-ke-tian*)
 José-ERG Rosa necklace give-O=S-PRT home-LOC go-PRF give-PRF-DS
 ‘When José gave Rosa a necklace, she (Rosa) went home.’
 b. Jose-kan Rosa kenti meni-a-ra, toet-a iki. (?* with *meni-ke-tian*)
 José-ERG Rosa pot give-O=S-PRT break-PTPL AUX give-PRF-DS
 ‘When José gave Rosa a pot, it broke.’

However, this special *-a* marker is not licit when the oblique complement of a verb is coreferential with the subject of the following clause, as shown in (42).²⁰

- (42) a. *Maria ochiti-ki raket-a-ra, ja natex-ke. (OK with *rake-ke-tian-ra*)
 Maria dog-DAT fear-O=S-PRT her bite-PRF fear-PRF-DS-PRT
 ‘Because Maria feared the dog, it bit her.’
 b. *Jose nonti-n nane-a-ra, jiki-ke. (OK with *nane-ke-tian-ra*)
 José canoe-INST get.in-O=S-PRT sink-PRF get.in-PRF-DS-PRT
 ‘José got into the boat and it sank.’

Given this, the two alternative analyses for *keenti*-type verbs make different predictions. On my analysis, the lower argument of a double absolutive construction is an NP, the lower of two NPs in a single VP. As such, it is like the theme argument of a ditransitive verb and is expected to allow the SR marker *-a* when it is coreferential with the matrix subject, parallel to (41b). The

²⁰ Something that needs to be controlled for in these examples is a parse in which the first verb and its arguments are analyzed as an internally headed relative clause rather than as an adjunct clause marked for SR. On this parse, *-a* is not an SR marker; rather, it is the perfective participle ending. (See Camacho 2010:264 for this concern.) One way to rule out this alternative parse is to use a matrix clause that is transitive, because then the clause in question would need to bear an ergative case marker to be an internally headed relative clause. This was done in (42a) and (64).

rival theory holds that the lower argument of a double absolutive construction is a PP, equivalent to other PPs for purposes of case theory. As such, it is comparable to the oblique PPs in (38) and should not allow *-a* when coreferential with the main clause subject; rather, it should need *-ke-tian*, as in (42). In fact, the first prediction is the correct one, as seen in (43).²¹

- (43) a. Rosa kenti keen-a-ra, toet-a iki. (# with *keen-ke-tian-ra*, DS)
 Rosa pot want-O=S-PRT break-PTPL AUX
 ‘Rosa liked the pot, but it broke.’
 b. Jose yapa shinanbenot-a-ra, payo-ke.
 José fish forget-O=S-PRT spoil-PRF
 ‘When José forgot the fish, it spoiled.’

We thus have independent evidence that the complements of *keenti*-class verbs behave syntactically like NP objects, not like PPs. Given this, it would be very dubious to attribute the absolutive case on their subjects to their complements’ being PPs syntactically. If we accept, then, that the complements of these verbs are truly NPs, we need another reason why they do not trigger ergative on the higher NP argument. My account in terms of VP’s being a domain for case assignment distinct from TP and bleeding ergative assignment on the TP level fits the bill.

4.3 Applicatives of Unaccusative Verbs

Now we come to the crux of the matter: comparing *keenti*-class verbs with applicatives derived from unaccusative verbs, discussed briefly in section 1. These two classes of predicates have something important in common: they both take two internal arguments inside the complement of *v* and no external argument in Spec,vP. Nevertheless, in applicatives of unaccusatives, one of the NPs is ergative, whereas with *keenti*-class verbs both NPs are absolutive. Seeking to understand this difference highlights the important features of ergative case assignment in my theory, and how it differs from theories that say ergative is an inherent case.

Shipibo has three applicative affixes (*-xon*, *-anan*, *-kin*; see PV:chap. 17), but I discuss only *-xon* here, since all the essential points can be made with this one. This affix can attach productively to transitive verbs and unergative verbs, adding an argument that is interpreted as being affected by the event—either a benefactive or a malefactive—and that is structurally lower than the agent, but higher than the theme (presumably—see footnote 11).

- (44) a. Jose-kan-ra Rosa atapa rete-xon-ke. (applicative of transitive)
 José-ERG-PRT Rosa hen kill-APPL-PRF
 ‘José killed a hen for Rosa.’
 (See also PV:695–699)

²¹ The SR marker *-a* can also be used to show that the theme argument of a reciprocalized ditransitive is coreferential with the main clause subject. This is expected, since these have essentially the same structure as *keenti*-type verbs, on my analysis.

- b. Papashoko-n-ra Rosa bewa-xon-ai. (applicative of unergative)
 grandfather-ERG-PRT Rosa sing-APPL-IMPF
 ‘The grandfather is singing for Rosa.’
 (See also PV:689–690)

According to Valenzuela (2003), and for two of my three consultants, *-xon* can also attach to unaccusative verbs. One example was given in (9b); (45) gives two more. Other attested examples have glosses like ‘get sick on’, ‘grow up for’, ‘turn sour (ferment) for’, and ‘sink on’.

- (45) a. Nokon shino-n-ra e-a mawa-xon-ke. (*shino-ra)
 my.GEN monkey-ERG-PRT me-ABS die-APPL-PRF monkey.ABS-PRT
 ‘My monkey died on me.’
 b. Nato yapa-n-ra Maria payo-xon-ke. (?*yapa-ra)
 this fish-ERG-PRT Maria spoil-APPL-PRF fish.ABS-PRT
 ‘This fish spoiled on Maria.’
 (See also PV:691, 694)

Again, these examples have an ergative NP; we do *not* get a double absolutive configuration in this case. As already mentioned, these examples show that nonagentive subjects can get ergative case in Shipibo, and hence that ergative is structural, not inherent, contrary to conclusions by Woolford (2006) and others. But these examples pose a theoretical challenge for my approach too. They are like *keenti*-class verbs in having two internal arguments—theme and experiencer/affectee—and no external argument. Why does this sort of structure give an absolutive-absolutive case pattern for one class of predicates and an ergative-absolutive pattern for the other?

The crucial difference, I claim, lies in which of the two internal arguments becomes the subject of the clause on the CP cycle. For *keenti*-class verbs, it is the higher of the two arguments, the experiencer, that becomes the subject, as shown by *-kan* agreement (see (35)) and SR marking (see (36)). This is also what is expected on simple theoretical grounds. But in the applicatives of unaccusative verbs, it is the lower argument, the theme, that becomes the subject of the clause. This is implied by the fact that it is the theme argument that gets ergative case in (9b) and (45); it is impossible for the applied argument to get ergative case instead.

- (46) *Maria-nin-ra nato yapa payo-xon-ke. (cf. (45b))
 Maria-ERG-PRT this fish spoil-APPL-PRF
 ‘This fish spoiled on Maria.’

That the theme counts as the subject of the clause is also confirmed by SR marking, which treats the theme rather than the experiencer as the subject, and by plural agreement, which expresses the plurality of the theme, not the experiencer.

- (47) Yapa payot-a pi-xon-ra, nokon shino-n
 fish spoil-PTPL eat-SS.TR-PRT my.GEN monkey-ERG
 e-a mawa-xon-ke. (SS marking
 me-ABS die-APPL-PRF if subject = theme)
 ‘Having eaten spoiled fish, my monkey died on me.’

- (48) Nokon atapa-baon-ra moa e-a ani-xon-kan-ke. (plural agreement with
 my.GEN hen-PL.ERG-PRT already me-ABS be.big-APPL-PL-PRF theme, not affectee)
 ‘My hens already grew up for me.’

Still, from a theoretical point of view it is somewhat surprising that the theme becomes the subject rather than the affected argument, given that in applicatives of transitive verbs the applied object is higher than the theme (see, e.g., Marantz 1993 for Bantu, Pykkänen 2008, B&V for Sakha, Baker 2012a for Amharic; see footnote 11 for possible support in Shipibo). Why then is it possible and necessary for the lower argument in the complement of *v* to move to Spec,IP?

To answer this, I borrow my proposal from Baker 2012b for the parallel question regarding Amharic applicatives with passive and unaccusative verbs. There, I claimed that the applied argument (and other goals) in Amharic are not technically NPs, but PPs consisting of the applied object and a null adposition. This null P is licensed by being in a local relationship with the Appl head, which has essentially the same semantic value as the P. However, the null-headed PP cannot move to Spec,IP to satisfy the EPP feature of I (Landau 2007), nor can the NP itself move out of this null-headed PP. The upshot of this is that, when the higher argument in the complement of *v* (ApplP or VP) is a PP of this sort, it is necessary for the lower argument (the theme) to move to Spec,IP and satisfy the EPP. This movement is presumably allowed by the Minimal Link Condition because the theme NP moves past a PP, not another NP. The crucial difference, then, between *keenti*-class verbs and unaccusative applicatives is that the higher of the two internal arguments is an NP in the first case (see (49)) but a PP in the second (see (50)). This distinction determines whether the higher or the lower argument moves to Spec,IP.²²

- (49) a. Complement of *v*: [_{VP} Rosa fish want] (*keenti*-class verbs)
 b. Complement of C: [_{IP} Rosa [_{VP} [_{VP} ⟨Rosa⟩ fish want] *v*] I]
 (50) a. Complement of *v*: [_{ApplP} P + me [_{VP} monkey die] Appl] (applicative of
 unaccusative)
 b. Complement of C: [_{IP} monkey [_{VP} [_{ApplP} P + me [_{VP} ⟨monkey⟩ die] Appl] *v*] I]

Now observe that, although there are no c-command relationships between NPs in the IP domain that were not already present in the VP domain in (49), this is not true in (50). In (50), ‘monkey’ c-commands ‘me’ when IP is spelled out, but it did not c-command ‘me’ when ApplP was spelled out. This c-command relationship is then considered at the Spell-Out of IP, and it results in the theme argument getting ergative in Shipibo.²³ This explains the difference between the two types

²² An anonymous reviewer asks whether the theme moves to a position higher than the applied argument within ApplP or vP, on its way to Spec,IP in (50). Indeed, the theory of phases applied to movement might imply that it must, if an element can only move out of a phase by moving through the edge of that phase. That should be fine, but one must clarify that the higher copy of the theme at the edge of the vP phase is not spelled out with *v*'s ApplP/VP complement, so that the c-command pair (theme, affectee) is not considered for case assignment. If it were, ergative case assignment to the theme would be blocked at the Spell-Out of IP, according to my assumptions.

²³ Similarly, in an accusative language like Amharic, this structure results in the applied argument's being marked as accusative; see Baker 2012a:51. In both languages, we see that the null P in an applicative structure does *not* make

of dyadic nonagentive constructions. We now see that there are two ways that ergative case can be triggered on the CP cycle: either by adding a new NP that was not there on the previous cycle, or by moving one NP past the other on that cycle (by A-movement; see footnote 12). These two distinct scenarios fit naturally together under the principles developed here.

Valenzuela (2003:732–733) observes that *-xon* applicatives can also be formed out of some *keenti*-class verbs, and when they are, the experiencer subject is ergative, not absolutive. My consultants also allow this (with a bit of lexical variation), as in (51), for example.

- (51) Nokon awin-in-ra e-a westiora benbo bake-n-xon-ke.
 my.GEN wife-ERG-PRT me-ABS one male child-VBZR-APPL-PRF
 ‘My wife bore a son for me.’
 (See also PV:732–733)

Such examples are significant because they show that the subjects of *keenti*-class verbs are not simply lexically marked as being immune to ergative case marking, perhaps because they have covert dative case, or as some kind of exception feature. (51) shows that the subjects of these verbs can perfectly well be ergative when the circumstances are right. These examples can be explained in the same way as the applicatives of simple unaccusative verbs are; the only difference is that they have two NPs in the inner VP to start with rather than one. The applied argument is added outside VP by the Appl head, and it is a null-headed PP that cannot satisfy the EPP feature of I. The second-highest NP in the clause, the experiencer, thus moves to Spec,IP instead. This creates a new c-command relationship between the experiencer and the applied argument, so the experiencer becomes ergative when the IP is spelled out, as sketched in (52).

- (52) a. Complement of v: [_{AppIP} P + me [_{VP} wife male bear] Appl]
 (wife, male) is considered, but no case is assigned.
 b. Complement of C: [_{IP} wife [_{VP} [_{AppIP} P + me [_{VP} ⟨wife⟩ male bear] Appl] v] I]
 New c-command pair is created, (wife, me), so ‘wife’ is ergative.

There is some independent evidence that unaccusative applicatives in Shipibo do have a special syntactic representation, different from that of other ergative structures, including simple transitives. Consider the adverb ‘well’. In Shipibo, this adverb agrees with the subject in case: if the subject is absolutive, the form is *jakoni*; if the subject is ergative, then the form is *jakonhakin*.²⁴

its NP complement invisible to the rules of dependent case assignment, as overt Ps typically do; hence, the subject is ergative in (45) but not in (38). This transparent P of applicative constructions also does not make its NP complement invisible for the object = subject SR marker *-a*, the way that other Ps do, so applied objects behave like ordinary objects in this respect (PV:711), not like PPs. This may show that SR and case marking are related in some significant way in Shipibo (see Camacho 2010).

²⁴ The morphology of these forms, with suffixes *-i* and *-(a)kin*, looks like SR marking on simultaneous clauses, and that is no doubt where these forms come from historically. However, the semantics of the examples cannot be derived by saying that *jakon* in (say) (53b) is a subordinate clause with *Maria* as its subject: it does not mean ‘Maria was good and washed the clothes’. (And even if this marking on the adverb does reduce to SR marking somehow, that wouldn’t much change the point at hand, assuming that the two forms of SS marking in Shipibo are themselves instances of agreement in case with the matrix subject (see Camacho 2010).)

- (53) a. Jose-ra jakoni/*jakonha-kin teet-ai.
 José-PRT well.ABS/*well-ERG work-IMPF
 ‘José works well.’
- b. Maria-nin-ra jakonha-kin/*jakoni chopá patsa-ke.
 Maria-ERG-PTL well-ERG/*well.ABS clothes wash-PRF
 ‘Maria washed the clothes well.’
 (See also PV:855–856, LLD:209)

But applicatives of unaccusatives are exceptions to this simple surface generalization: they occur with the intransitive *jakoni* form, not the transitive *jakonhakin* form.²⁵

- (54) a. Nokon atapa-nin-ra jakoni/*jakonha-kin e-a ani-xon-ke.
 my.GEN hen-ERG-PRT well.ABS/*well-ERG me-ABS be.big-APPL-PRF
 ‘My hen grew up well for me.’
- b. Bimi-n-ra jakoni/*jakonha-kin Rosa joshin-xon-ke.
 fruit-ERG-PTL well.ABS/*well-ERG Rosa ripen-APPL-PRF
 ‘The fruit ripened well for Rosa.’

These examples suggest that there is something intransitive about the unaccusative applicatives, despite their surface transitivity. We can express this by saying that the adverb is adjoined to vP and agrees in case with the closest NP, probing downward. If there is an agent in Spec,vP, then the adverb agrees with that nominal, showing up as ergative in (53b) but as absolutive in (53a). But in applicatives of unaccusatives, there is no agent in Spec,vP. The next thing the adverb can agree with, probing downward, is the applied argument in Spec,ApplP. But that argument is absolutive. Therefore, the adverb shows its intransitive form. There is an ergative nominal in these structures, but it is only the copy of the theme in Spec,IP, too high for this kind of adverb to agree with. On this interpretation, the agreeing adverb confirms that there is something special about applicatives of unaccusatives: they are the only structure in which ergative is the result of c-command relationships’ being changed by movement to Spec,IP. They are thus counterexamples to Marantz’s (1991) influential generalization that derived subjects do not get ergative case.

The position of the adverb plays an important role in this account: it is crucial that the adverb appear in vP, above a thematic subject in Spec,vP but below a nonthematic subject that is only in Spec,IP. That is plausible for a manner adverb like ‘well’, but we expect a different behavior from an adverb that attaches higher, above Spec,IP. Indeed, Shipibo has a temporal adverb ‘then’ that also has two agreeing forms. (55a) shows the form *jainoax*, which agrees with an absolutive subject; (55b) shows the form *jainxon*, which agrees with an ergative subject.²⁶

²⁵ These data are from consultant 3 only, since consultant 2 doesn’t allow *-xon* on unaccusatives.

²⁶ This generalization held up well for two of my consultants. For the third, another meaning of *jainoax* and *jainxon* as locatives meaning ‘here’ and ‘there’ obscured the pattern. Also like ‘then’ in my data was *kikinhakin/kikini*, meaning ‘completely’.

- (55) a. Jain-oax-a Rosa jo-ke. (*jain-xon-ra)
 then-ABS-PRT Rosa come-PRF
 'Then Rosa came.'
 b. Jain-xon-ra Rosa-n chopa patsa-ke. (*jain-oax-a)
 then-ERG-PRT Rosa-ERG clothes wash-PRF
 'Then Rosa washed clothes.'

(56) gives an example of this adverb with the applicative of an unaccusative. Here the adverb has its ergative-agreeing form, different from the manner adverbs in (54).

- (56) Jain-xon-ra nokon ochiti-nin e-a mawa-xon-ke. (*jain-oax-a)
 then-ERG-PRT my.GEN dog-ERG me-ABS die-APPL-PRF
 'Then my dog died on me.'

This follows if 'then' as a temporal adverb is attached to IP. Then the closest NP it finds probing downward is the one in Spec,IP, and that is the ergative theme argument in (56), as in (55b).

Another syntactic test that supports the special properties of applicative-of-unaccusative structures is the use of pro-verbs/auxiliaries. I mentioned in section 2.3 that Shipibo has two distinct verbs that are used as pro-verbs when giving a short answer to a yes/no question: *ati* when the antecedent verb has both an internal argument and an external argument, and *iti* otherwise (see (18)). Consistent with this generalization, unaccusative applicatives use *iti*, not *ati*—showing that they have two internal arguments but no external one.

- (57) a. Mi-n atapa-nin-ki mi-a ani-xon-a? I-kama. (*A-kama)
 you-GEN hen-ERG-Q you-ABS be.big-APPL-PTPL do.INTR-NEG
 'Did your chicken grow for you?' 'No.'
 b. Mi-n shino-n-ki mi-a mawa-xon-a? I-kama. (*A-kama)
 you-GEN monkey-ERG-Q you-ABS die-APPL-PTPL do.INTR-NEG
 'Did your monkey die on you?' 'No.'

In contrast, an applicative formed from an unergative is paired with *ati*, not *iti*, since the verb has an external argument intrinsically, and the applicative morpheme adds an internal one.

- (58) Mi-n-ki mi-n bake bewa-xon-a? A-kama. (*I-kama)
 you-ERG-Q you-GEN child sing-APPL-PTPL do.TR-NEG
 'Did you sing for your child?' 'No.'

The contrast between (57) and (58) proves that this phenomenon is sensitive to the argument structure of the predicates involved, not just to the surface case pattern, which is the same in both. (It thus strengthens the conclusion based on (18) that verbs like *winati* 'row' are transitive.) Given this, it is also relevant to note that *keenti*-class verbs also appear with *iti*, not *ati*.

- (59) a. Mi-a-ki nato teoti keen-ai? I-kama.
 you-ABS-Q this necklace want-IMPF do.INTR-NEG
 'Do you like this necklace?' 'No.'

- b. Mi-a-ki koriki shinanbenot-a? I-kama.
 you-ABS-Q money forget-PTPL do.INTR-NEG
 ‘Have you forgotten the money?’ ‘No.’

This confirms my assumption that these verbs also have two internal arguments but no external argument—which is crucial to explaining why these verbs have no ergative NP.²⁷

My conclusion from these data is that applicatives of unaccusative verbs are indeed distinct from applicatives of unergative verbs in argument structure: they have themes/internal arguments, not agents/external arguments. Nevertheless, the derived subjects of these predicates are ergative, supporting a dependent case theory over an inherent case theory. Experiencer predicates also have two internal arguments, but their derived subject is not ergative. The difference stems from whether the c-command relationship between the subject and the nonsubject is new at the Spell-Out of IP or not: yes for applicatives, no for experiencer predicates.

5 Desiderative Constructions with Optional Ergative Subjects

Finally, let us consider one construction in Shipibo in which the subject is reported as being *optionally* ergative: the desiderative. This has a twofold interest for our main topic. First, one would like to know what conditions the optionality, given that the ergative rule in (5)/(29c) makes no provision for optionality, and in other situations ergative case is obligatory if its structural description is met and impossible otherwise. Second, the version with an absolutive subject raises the question of whether there are special, language-particular domains for case assignment in Shipibo: do we need to stipulate that “desiderative phrases” are additional phases in this language, for example? I argue that this is not necessary. Rather, what we have is an instance of the familiar phenomenon of restructuring: a collection of items can be parsed as either a biclausal structure or a monoclausal one. Once this is accepted, the ergative rule applies as expected. There is no optionality in the case assignment rule itself; rather, there is variation in the structure that it applies to. There is also no need for any special language-particular phases, because the domain in question is (essentially) a CP, which is a phase in all languages on all accounts.

The desiderative construction in Shipibo is formed by suffixing the very productive morpheme *-kas* to the verb stem. If the base verb is intransitive, the subject is always absolutive, but if the base verb is transitive, then the subject can be either absolutive or ergative, as shown in

²⁷ The reciprocals of ditransitives also use *i-kama* in “no” answers. This fits with the idea that these have approximately the same structure as *keenti*-type verbs. But there are subtleties for theorists interested in reciprocal voice to consider. As I stated the generalization for *iti* versus *ati*, the reciprocal of a ditransitive must not have an external argument, since it clearly has at least one internal argument. That consideration might point to a passive-like analysis of reciprocal voice, in which the agent argument is completely suppressed in the syntax, rather than the analysis in terms of movement to a θ -position that I sketched in (33). However, one does not want to say that reciprocals of applicative verbs are *exactly* like applicatives of unaccusative verbs, because the goal/applied argument can raise out of VP/AppIP in reciprocals, but not in simple unaccusatives because of the null PP structure that contains it. This difference makes sense if the movement targets Spec.VoiceP rather than Spec,IP, as in (33), so thematic considerations are relevant but the EPP is not. It is not clear, then, exactly what analysis of reciprocal verbs is best overall, and I leave this issue to future research.

(60). It is important to emphasize that there is no comparable optionality in superficially very similar sentences where the verb is simply *pi-ai* ‘am eating’.

- (60) a. E-a-ra yapa pi-kas-ai.
I-ABS-PRT fish eat-want-IMPF
‘I want to eat fish.’
- b. E-n-ra yapa pi-kas-ai.
I-ERG-PRT fish eat-want-IMPF
‘I want to eat the fish (e.g., that is on the table).’
(PV:367)

Valenzuela (2003:367, 576–577) claims that the ergativity of the subject in these examples is conditioned by the definiteness of the object: (60a) means ‘I want to eat fish in general (any fish)’, whereas (60b) means ‘I want to eat some definite fish known from the speech context’. If true, this would be theoretically very interesting, recalling the fact that definite objects trigger ergative on the subject in simple clauses in (e.g.) Eastern Ostyak (see (25)), although not in Shipibo (see (26)). But Valenzuela’s generalization does not hold up under scrutiny. (61) is an example in which the object is definite but the subject is absolutive.

- (61) E-a-ra mi-n joi axe-kas-ai.
I-ABS-PRT YOU-GEN word learn-want-IMPF
‘I want to learn your language.’
(LLD:23; also OK for my consultants)

And when I intentionally varied the definiteness of the object in elicitation, this had little or no effect on the case of the subject: ergative marking on the subject is generally optional both with highly definite objects and with highly indefinite ones. Indeed, all of my consultants expressed a preference for the subject to be absolutive, and one of them accepted only this version.

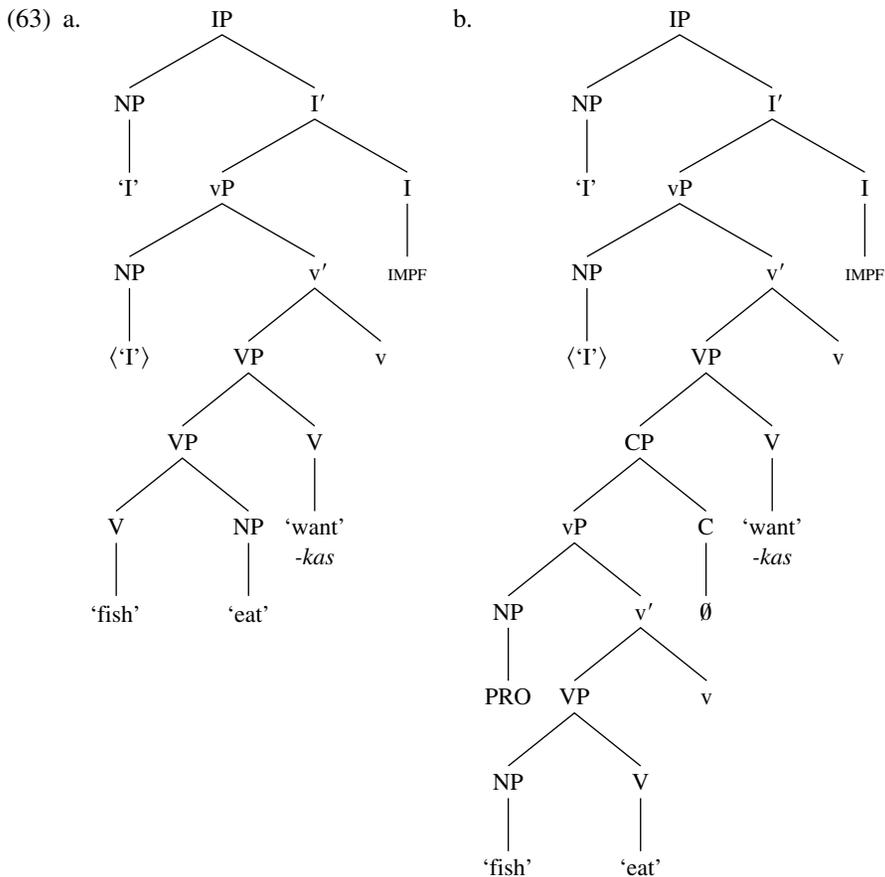
- (62) a. Maria-ra/(?)Maria-nin-ra koriki noko-kas-ai. (nonspecific indefinite object)
Maria-PRT/(?)Maria-ERG-PRT money find-want-IMPF
‘Maria wants to find (some) money.’
- b. Maria-ra/#Maria-nin-ra nokon ochiti noko-kas-ai. (definite object)
Maria-PRT/#Maria-ERG-PRT my.GEN dog find-want-IMPF
‘Maria wants to find my dog.’

Nor does word order have any clear effect on case marking in this construction: ergative is optional on the subject also if the order is OSV or SVO.

There can, however, be differences in syntactic structure that do not show up in surface word order. The item *-kas* in Shipibo is semantically similar to *querer* ‘want’ in Spanish or *volere* in Italian, and it is well-known that these verbs permit the phenomenon of restructuring, such that the desiderative verb and its verbal complement can behave like a biclausal construction or like a monoclausal one, in more or less free variation. Generally speaking, a restructuring construction is one that has two verbs but nevertheless behaves like a single clause. Restructuring does

not typically depend on the definiteness of the object, so if this is the only factor in Shipibo, one would expect ergative on the subject to be optional regardless of the definiteness of the object. This fits what we observe. Of course, discourse factors and nuances of meaning can influence restructuring, but such effects are known to be subtle ones.

More specifically, I adopt Wurmbrand's (2003) approach to restructuring, in which there is no literal structure-changing rule (as Rizzi (1982:chap. 1) originally proposed for Italian), but there is a difference in the size of the complement that the restructuring verb takes. The matrix verb can select either a bare VP complement or something more like a full clause. If it selects VP, the VP contains the verb root and its complements, but no subject or higher functional heads; in particular, there is no vP structure dominating the lower VP. If it selects something like a full clause, then there is a vP and an embedded subject, although that subject is null and controlled by the matrix subject. The two structures are compared in (63).



Now we can ask how ergative case assignment works in these two structures. The structure in (63a) contains only two phase heads: the matrix *v* and the matrix *C*. Hence, the spell-out dynamics for this structure are no different from those of a simple clause. Since *vP* is a soft phase

in Shipibo, NPs inside its VP complement are still visible on the CP cycle. Therefore, ‘fish’ in this structure triggers ergative on the matrix subject. In contrast, there are four phase heads in (63b), two *vs* and two *Cs*. CP in particular is a hard phase, so material properly contained in the embedded CP is not visible on the matrix CP cycle, when the question of how to case-mark the matrix subject ‘I’ arises. When the matrix IP is spelled out, the only other constituent visible to the matrix subject is the CP complement of ‘want’, and this does not trigger ergative on the subject because it is not an NP. Therefore, once we posit familiar restructuring-type structures for these sentences, we can explain the apparent optionality of ergative case in terms of the well-known optionality of restructuring.

We can use Shipibo’s special SR marker *-a* to confirm that there is a covert structural difference between desiderative sentences that have an ergative subject and ones that do not. We saw in section 4.2 that this affix is used when the object of the subordinate clause is coreferential with the subject of the matrix clause. However, *-a* cannot be used when the object of the clausal complement of the subordinate verb is the same as the matrix subject.

- (64) ??E-*a* ochiti rete-ti keen-a-ra, e-a natex-ke. (better with *keen-ke-tian-ra*)
 I-ABS dog kill-INF want-O=S-PRT me-ABS bite-PRF want-PRF-DS-PRT
 ‘I wanted the dog killed, so it bit me.’ (contrast with (40b))

Although I am not proposing a precise theory of *-a* here, it is to be expected that it is subject to some reasonable kind of locality: *-a* doesn’t say that a given NP that is the object of *any* verb is coreferential with the matrix subject; it has to be an object of the verb that bears *-a* itself. However, restructuring would affect this, in that, descriptively speaking, the thematic object of the lower verb acts as the object of the whole clause under restructuring. We can apply this result to the *-kas* construction. On its analysis in (63b), the NP ‘fish’ is the object of an embedded clause and hence it should not license *-a* marking, for the same reason that (64) is degraded. In contrast, on the analysis in (63a), ‘fish’ is an object in the only clause present, so it can be the target of *-a* marking. These predictions are confirmed: (65) shows that when a *V + kas* construction is used in a dependent clause, *-a* is possible if and only if the subject of *V + kas* is marked ergative.

- (65) Jose-kan/*Jose ochiti rete-kas-a-ra, ka-ke.
 José-ERG/*José.ABS dog kill-want-O=S-PRT go-PRF
 ‘José wanted to kill the dog, so it (the dog) left.’

This judgment is striking in that both relevant speakers spontaneously correct an absolutive subject in cases like (65) to ergative, even though this is the reverse of their usual preference for absolutive subjects in the desiderative. We see, then, that when the object of *V + kas* counts as the object of the clause as a whole for purposes of *-a* marking, it triggers ergative on the subject, and when it does not, the subject is absolutive. This is good confirmation for the dependent case analysis.

Even if one accepts that the difference between *V + kas* with an ergative subject and *V + kas* with an absolutive subject is a matter of restructuring, one might be uncomfortable with saying

that the complement of *-kas* in (63b) is a CP. After all, there is no overt morphological exponent of a complementizer (or even an embedded I) in the relevant examples. But many languages have null Cs in nonfinite clauses, so this is not astonishing either. And there is another piece of evidence that the complement of *-kas* in (63b) is a CP, or close enough. We saw in section 4.3 that the adverb ‘well’ in Shipibo agrees with the subject (the closest NP) in case: it is *jakoni* if this NP is absolutive and *jakonhakin* if it is ergative. Interestingly, when this adverb is used in a *-kas* construction, it must be *jakonhakin*, even if the overt subject is absolutive.

- (66) Maria-ra jakonha-kin/*jakoni chopa patsa-kas-ai.
 Maria-PRT well-ERG/*well.ABS clothes wash-want-IMPF
 ‘Maria wants to wash the clothes well.’

I claim that this is because the adverb is inside the embedded clause in (63b) (that is the verb that it modifies semantically), so it agrees with the embedded subject (PRO), not the matrix subject ‘Maria’—and the embedded subject is ergative. We know from concord facts that PRO in languages like Icelandic can bear case, and if we extend this to Shipibo it makes sense that the PRO in (63b) would be ergative, since it c-commands an object within the same clause. The adverb in (66) thus shows that the embedded clause is a domain in which ergative case is assigned. But we know that ergative case is not assigned in just any Spell-Out domain in Shipibo: it is assigned in IP domains, but not in VP domains (see (29)). I conclude that the complement of *-kas* in this structure, if not literally CP, is CP-like enough to count as a domain for ergative assignment. Given this, it is plausible to think that it is also CP-like enough to count as a hard phase, and that is what is needed to explain why the overt subject is absolutive rather than ergative in this version of the desiderative construction. The analysis thus hangs together. This justifies my claim that we do not need any special, nonstandard phases to account for Shipibo desideratives.

As far as I know, this holds throughout Shipibo. There is one other construction in the language that raises similar issues and deserves a brief mention: namely, a progressive construction formed by a thematic verb bearing the suffix *-i* used with the auxiliary verb *it-ai* ‘do.INTR-IMPF’. Citing examples similar to (67a–b), Valenzuela (2003:305) shows that the subject of this construction can be ergative or absolutive if the main verb is transitive.

- (67) a. Binpish koko-i-ra no-a it-ai. (*no-n)
 guayaba eat.fruit-SS.INTR-PRT we-ABS do.INTR-IMPF we-ERG
 ‘We are eating guayaba.’
 (PV:305, (119))
- b. Nato yapa-ra no-n pi-i it-ai. (??no-a)
 that fish-PRT we-ERG eat-SS.INTR do.INTR-IMPF we-ABS
 ‘We are eating that fish.’
 (cf. PV:305, (120))

For this construction, too, Valenzuela claims that the difference is whether the object is definite or not (no in (67a), yes in (67b)), but this claim is not supported by my consultants: if the object

is changed to *nato yapa* ‘this fish’ in (67a), the subject is still absolutive, and if the object is indefinite in (67b), the subject is still ergative. Rather, there is a difference in clause structure, as revealed by both word order and clitic placement. The second-position evidential clitic *-ra* in (67a) shows that ‘guayaba’ + ‘eat’ is a single constituent—an embedded clause—that does not contain the subject ‘we’. ‘We’ is therefore the subject of the intransitive verb *itai* in (67a), and the object ‘guayaba’ is in a different clause, so ‘we’ is predictably absolutive. In contrast, *-ra* in (67b) follows only the object NP, showing that this NP is not part of a subordinate clause in this case. This is a one-clause structure that has both a subject and an object, so the case on the subject is ergative. Here too a kind of restructuring distinguishes (67a) from (67b), but ergative marking is predictable given the restructuring. This account of (67a) in Shipibo is exactly like Laka’s (2006a) account of apparent split ergativity in Basque and Coon’s (2010) account of Chol: in each case, the progressive sentence is biclausal, and this explains the case marking of the subject.

6 Conclusion

In this article, I have shown that ergative case in Shipibo comes from a straightforward rule of dependent case assignment, such that an NP is ergative if and only if it c-commands another NP in an IP domain. On the surface, there are interesting apparent exceptions to this, but they can all be accounted for in terms of complications in the structure that the ergative rule applies to—complications that are independently motivated. For example, reciprocals of ditransitive verbs and certain psych verbs have two absolutive NPs and no ergative because both arguments are contained in a VP domain, not (at first) in IP. Similarly, the subject of a desiderative clause can be absolutive rather than ergative because the construction can be biclausal rather than monoclausal, and the subjects of certain apparently intransitive verbs are ergative because those verbs have null objects. A simple structural account of ergative is therefore supported.

I have also argued that we learn something important from this about when and how case assignment happens: it happens cyclically, phase by phase, with VP counting as a Spell-Out domain distinct from IP. This is crucial to explaining why ergative case is not assigned to goals in double object constructions, or to experiencers in psych verbs, whereas ergative is assigned in the minimally different applicatives of unaccusative verbs. These subtle facts can be derived if we say that ergative applies only if an NP c-commands another NP in IP that it did not already c-command when VP was spelled out. This type of complexity thus comes not from the statement of the ergative assignment rule itself, but from how it applies phase by phase.

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