

On Dependent Case and the Sometimes Independence of Ergativity and Differential Object Marking

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Abstract: Dependent case theory is built on the idea that ergative case and accusative case are both assigned when one NP c-commands another in the same domain. This seems to imply that, in a language that has both, the subject will be ergative if and only if the object is accusative. This is true for languages like Nez Perce, but strikingly false for Hindi. In Hindi, ergative case assignment depends on the aspect of the clause, perfective or imperfective, whereas accusative case assignment depends on the specificity/definiteness of the object, and the two factors vary independently. First, I discuss evidence that both ergative case and accusative case are structural dependent cases in Hindi, despite some claims to the contrary. Then I show how the seeming-contradiction for dependent case theory can be resolved if ergative case and accusative case are actually assigned in slightly different domains: ergative in the vP complement of Aspect, and accusative in the TP complement of C. I argue that dative case is also a dependent case in Hindi, comparable to ergative, yet dative subjects never trigger accusative case on direct objects because of the special status of c-command relationships that are established the first time that NPs are spelled out.

Keywords: split ergativity, differential object marking, dependent case, accusative, ergative, dative, Hindi

1. Introduction: A tension within Dependent Case Theory

In recent years, there has been significant interest in so-called dependent case assignment: see Marantz (1991), McFadden (2004), Bobaljik (2008), Baker and Vinokurova (2010), Baker (2014), Preminger (2015), Baker 2015, and Baker and Bobaljik (2017), among others. This body of work includes investigation into areas in which this mode of case assignment might provide a better account of certain phenomena than other views, such as case being assigned via agreement with a functional head, or inherent case being assigned by a theta-role assigning head to a designated argument. One such area is the assignment of ergative case in languages that have it. A second area is the assignment of accusative case in languages with differential object marking. Now some languages, such as Hindi, have both of these phenomena. A further question thus arises then for these languages: is it possible to analyze both phenomena in terms of dependent case assignment simultaneously. In some languages, this is straightforward, but in others it certainly is not. The question explored in this chapter, then, is whether it is possible to maintain all of the putative advantages of DCT simultaneously for such a language, and if so, how.

I start by sketching out the tension that arises more fully. One domain in which the DCT is particularly attractive is ergative case assignment. Ergative case is a case assigned to the subjects of transitive verbs, but not to the subjects of intransitive verbs or to direct objects, as in (1) from the Panoan language Shipibo.

- (1) a. **Maria-nin-ra** ochiti noko-ke. (Baker 2014)

Maria-ERG-PRT dog find-PFV
'Maria found the dog.'

- b. Rosa-ra bewa-ke.
Rosa-PRT sing-PFV
'Rosa sang.'

As has been clear since Marantz (1991) (and Comrie (1978), within functionalist terms), this pattern is almost trivially easy to account for in terms of a DCT. On this view, the rule of ergative case assignment is simply the converse of the accusative case assignment rule, as in (2).

- (2) a. If NP1 c-commands NP2 in the same domain, then assign NP2 *accusative*.
b. If NP1 c-commands NP2 in the same domain, then assign NP1 *ergative*.

In contrast, agreement based theories struggle with ergative case, as discussed elsewhere (e.g. Baker 2015: 39-45).¹ Inherent case theories of ergative case assignment are a bit more promising, but within these theories it is not clear why *v* should assign case to the agent of a transitive verb but not to the agent of an unergative verb, given that both are agents, generated in the same structural position (see Baker and Bobaljik 2017 for discussion).

The advantages that DCT has for ergative assignment in uniformly ergative languages like Shipibo presumably extend to split ergative languages as well, where ergative case found is on transitive subjects in clauses with some tense-aspects (e.g., past and/or perfective) but not others. Hindi is famously such a language; see (5) below. Here a common idea has been that the subject and the object automatically find themselves in the same domain in some tense-aspects but not in others—for example, because some relevant head is a phase head defining a separate spell out domain in imperfective clauses but not in perfective clauses (Coon and Preminger 2017, Baker 2015: 155-162).

A second empirical domain in which dependent case marking has been fruitfully applied is differential object marking (DOM). Baker and Vinokurova (2010) combine dependent case assignment with Chomsky's (2000, 2001) hypothesis that the VP complements of *v* heads are spell out domains relevant to locality, just as the TP complements of *C* are. As a result, the direct object is invisible to the subject by the Phase Impenetrability Constraint (PIC) unless the object moves out of VP by object shift. This movement is correlated with the object having a "strong" specific reading, according to (some version of) Diesing's (1992) Mapping Hypothesis. This explains why word order, case marking, and semantic interpretation are all interrelated in a language like Sakha, as seen in (3). Here the accusative-marked object has a definite or specific interpretation, and its preferred word order is outside of a VP-adverb like 'quickly' ((3a)). In contrast, the un-case-marked object in (3b) has a nonspecific indefinite reading only, and it must come after the VP-adverb, left-adjacent to the verb.²

¹ In short, the key issue is that both transitive and intransitive subjects seem to be in the same structural position relative to clausal functional heads. Given this, it is far from clear why an ergative or absolutive assigning functional head should agree with one but not the other.

² This is only one kind of DOM among several. For example, there is also a morphological kind, in which accusative case is spelled out one way on some nominals (e.g. animate ones, or pronouns) and another way (perhaps as null) on other nominals. See Baker (2015: 131, 297) and references cited there for a tentative distinction among three types.

- (3) a. Masha salamaat-y [VP türgennik t sie-te].
 Masha porridge-ACC quickly eat-PST.3.SG
 ‘Masha ate the porridge quickly.’ (*Object is *without ACC*)
- b. Masha [VP türgennik salamaat sie-te].
 Masha quickly porridge eat-PST.3.SG
 ‘Masha ate porridge quickly.’ (*ACC is marked, implies that the object is focused*)

Now if these two applications of DCT are both conceptually and empirically attractive, the question arises how they interact in a language that has both accusative case and ergative case. According to the fundamental logic of DCT, it would seem that the very movement that feeds accusative case assignment to the object should also feed ergative case assignment to the subject, since both are responses to the same structural configuration, according to (2). Therefore, we expect ergative and accusative marking to be interdependent: either the subject is ergative and the object is accusative, when the object has shifted out of VP, or both show up with unmarked case, when the object remains inside VP. This is strikingly true in Nez Perce, as Baker (2015: 129) emphasizes (see also Deal 2010 for a somewhat different account).

- (4) a. Háama hi-‘wí-ye wewúkiye.
 man.NOM 3-shoot-ASP elk.NOM
 ‘The man shot an elk.’ (indefinite object, presumably inside VP)
- b. Háama-nm hi-néec-‘wí-ye wewúkiye-ne.
 man-ERG 3-PL.OBJ-shoot-ASP elk-ACC
 ‘The man shot the elk(pl).’ (definite object, presumably shifted out of VP)

This is strong support for the intrinsic symmetry between ergative case and accusative case that is baked into the DCT.

Also comfortably within the domain of the basic DCT account are uniformly tripartite languages like Diyari (Austin 1981), in which ergative is assigned to all transitive subjects, and accusative is assigned to all direct objects, regardless of the position and interpretation of the object.³ For such languages, Baker (2015) claims that *v* is a *soft phase head*, so that NPs inside the VP complement of *v* undergo an initial spell out, but they are not removed from the syntactic representation. As a result, the object and the subject always see each other at the spell out of TP and each triggers dependent case on the other, even if the object does not move out of VP. Although Diyari and Nez Perce are different in this respect, they both conform to the fundamental expectation of the DCT that the transitive subject is ergative if and only if the object is accusative.

But these are not the only ways that ergative case and accusative case can interact within the same grammatical system. There are also languages in which ergative case and accusative case function independently of each other. Hindi is a relatively well-studied example. Ergative case is found on transitive subjects of perfective clauses, but not on subjects of imperfective clauses, as shown in (5b,c) versus (5a,d). At the same time, accusative case is found on

³ These cases are not, however spelled out by overt morphology on every type of nominal in Diyari. See Austin (1981) and Baker (2015: 22-25).

definite/specific direct objects, but not on nonspecific indefinite objects.⁴ Crucially, these two generalizations hold independently of each other, such that all four logical possibilities are attested. The subject can be ergative and the object accusative ((5b)), or both can be in unmarked case ((5a)), the two possibilities found in Nez Perce. But it is also possible for the subject to be ergative and the object unmarked, as in (5c), and for the subject to be unmarked and the object accusative, as in (5d). (See Mohanan (1994: ch 4 and 5) for a relatively complete description, among many others; (5) is adapted from Bhatt (2005: 759).)

- (5) a. Rahul kitaab paRh-taa thaa.
 Rahul.M book.F read-IPFV.M be.PST.M
 ‘Rahul used to read (a/the) book.’
- b. Rahul-ne kitaab-ko paRh-aa thaa.
 Rahul-ERG book-ACC read-PFV.M be.PST.M
 ‘Rahul had read the book.’
- c. Rahul-ne kitaab paRh-ii thii.
 Rahul-ERG book.F read-PFV.F be.PST.F
 ‘Rahul had read (a/the) book.’
- d. Rahul kitaab-ko paRh-taa thaa. (Deepak Alok, p.c.)
 Rahul.M book-ACC read-IPFV.M be.PST.M
 ‘Rahul used to read the book.’

Here a pure DCT seems to have hit a wall. If the object is accusative in (5d) because it is c-commanded by the subject in the same domain, then the subject should be ergative, contrary to fact. Conversely, if the subject is ergative in (5c) because it c-commands an object in the same domain, then the object should be accusative, again contrary to fact. Baker (2015: 54, 291n.5) thus assumes that at least one of ergative or accusative is not a structural dependent case in Hindi, but he leaves open which.

This issue is not unique to Hindi and its close Indo-Aryan kin. It also arises in some Iranian languages. These languages developed split ergativity in the Middle Iranian period (see Haig 2008 for discussion) by a path parallel to but independent of what happened in Indo-Aryan. Some conservative Iranian languages have also developed DOM, and this operates independently of split ergativity. Thus, Stilo (2009: 709-710) reports a four way alignment pattern for the Vafsi language that is exactly parallel to (5) in Hindi.

Also relevant is the Elgoibar dialect of Basque, described by Odria (2014). Basque is a uniformly ergative language, rather than a split ergative language. This dialect has also developed DOM in contact with Spanish (Odria 2014). Thus, indefinite and inanimate objects are marked with absolutive case ((6b)) whereas definite human objects are marked with what is historically the dative case ((6a)). Nevertheless, the subject is consistently ergative, independent of this alternation with the object, like perfective clauses in Hindi.

⁴ Although this is a routine characterization of *ko* marking (see e.g. Butt and King 2003: 80-81) Veneeta Dayal (personal communication) points out some examples that challenge the relationship of *ko* marking to specificity, at least in a simplistic version. See the end of section 2.2 for some preliminary discussion of these. Animacy also impacts the distribution of *ko*, a factor that I ignore here, except for a remark in note 13.

- (6) a. Haie-k Peru-ri erabili ein di-o-te. (Odría 2014: 299)
 they-ERG Peru-DAT use do AUX-3.SG.DAT-3.PL
 ‘They have used Peru.’
- b. Haie-k neska batzu(k)-(*ei) hartu ditxu-zte lan-erako.
 they-ERG girl some.NOM/(**DAT*)take AUX.3.PL-3.PL work-DEST
 ‘They have hired some girls.’

So the independence of subject case marking and DOM can be a feature of uniformly ergative languages as well as split ergative languages. Another language like Elgoibar Basque may be the Australian language Pitjantjatjara (Pama-Nyungan), discussed in Aissen (2003: 452). Overall, it is an open question whether it is more common for ergative marking and DOM to be tightly correlated, as in Nez Perce, or for them to be independent, as in Hindi and the other languages mentioned here.

In this chapter, I argue that the DCT should not and need not give up as easily on languages like Hindi as I did in Baker (2015). Section 2 reinforces the desirability of reconciling the two DCT analyses. First, I show that there is good reason to say that DCT is a major part of the story about ergative case in Hindi, despite some superficial evidence to the contrary (section 2.1). Then I show that there is also reason to stick to a DCT view of DOM in Hindi (section 2.2). Section 3 then turns to a specific proposal for reconciling these two DCT analyses. I show that both can be true if one uses the theory of domains more fully. It is already a feature of the DCT that different repertoires of dependent cases can be assigned in different domains. For example, ergative is assigned to the higher of two NPs in a clause (TP), but dative is assigned to the higher NP in VP in Hindi (section 3.1). Suppose then that what is special about Hindi and similar languages is that they have a third kind of domain in clause structure: some Aspect heads are phase heads, as well as C and v. Then ergative can be high dependent case assigned when the complement of Aspect is spelled out, whereas accusative is low dependent case assigned when the complement of C is spelled out. This allows us to use DCT for both phenomena, at a modest theoretical cost. First I develop an account for ergative clauses, including perfective clauses in Hindi and any clause in Elgoibar Basque (section 3.2). Then I discuss how to extend the account to imperfective clauses in Hindi (section 3.3). I conclude by facing a puzzle that arises in this account, concerning why DOM is possible in Hindi with ergative subjects but not with dative subjects, even though both are dependent cases in Hindi (section 3.4). Section 4 is a brief conclusion.

2. The unavailability of the tension in Hindi

2.1 Evidence that ergative is a dependent case in Hindi

Before going to the effort of developing a unified DCT account, we should consider more carefully whether it is worth going to the effort to do so. For example, one might be able to keep the Sakha-like analysis of DOM if ergative in Hindi is an inherent case—as has often been claimed in the literature (see, for example, Mohanan (1994), Butt and King (2003), Anand and Nevins (2006), Mahajan (2012)—although not Davison (2004)). Indeed, I tentatively accepted this analysis of ergative in Hindi myself (Baker 2015:54).

One prima facie reason to be unsure about the DCT account of Hindi as opposed to a more canonical ergative language like Shipibo is Hindi's split ergativity itself. It is not immediately obvious why the aspect of the clause should affect a rule like (2b). (However, it is equally unclear why the aspect of the clause should affect ergative case assignment in an inherent case view, where the subject is case-marked by its theta-marking head, if that is DCT's main competition in this area.)

Another reason to question the DCT as an account of ergative case in Hindi is the fact that the subjects of certain intransitive verbs can be marked ergative in perfective clauses, as well as transitive subjects (Mohan 1994: 71-72, Butt and King 2003, among others). This class includes verbs of sound emission like 'cough', 'sneeze', 'talk' and 'bark', as well as a few others, such as 'peek'/'look out' and 'bathe'. (The exact contours of this class is not entirely clear from the literature.)

- (7) Ram-(ne) phir ch^hiNk-aa/khaaNs-aa/j^haaNk-aa. (LISSIM workshop)
 Ram-(ERG) again sneeze-PFV.M/cough-PFV.M/peek-PFV.M
 'Ram sneezed/coughed/peeked again.'

Moreover, ergative case is said to be preferred with these verbs if the agency or conscious choice of the subject is emphasized. For example, ergative case marking in (8) goes well with the notion that Ram is performing a fake cough on purpose, as a signal to his coconspirators.

- (8) Signal-ke taur-pe Ram(-ne) khaaNs-aa. (LISSIM workshop, Bhatt p.c.)
 signal-GEN manner-LOC Ram-(ERG) cough-PFV.M
 'Ram gave a fake cough as a signal.'

There is thus a clear attraction to saying that *ne* is a marker of the agent theta role—presumably a sort of inherent case assigned by *v* to the agent in Spec vP—rather than a dependent case marker. If so, this would clear the way to analyze DOM in terms of dependent case.

But this is clearly not the whole story. It cannot be denied that transitivity is also a factor in the use of the ergative marker *ne* in Hindi. Indeed, it can be argued that it is the dominant factor. Thus, ergative marking is never obligatory on intransitive subjects in Hindi, even when an agentive reading is intended.⁵ Hence *ne* is optional not only in (7), but even in (8). In contrast, ergative marking is obligatory with (almost all) transitive subjects in perfective clauses in Hindi; for example, there is no option of omitting *ne* in (5b,c).⁶ Moreover, not all probable unergative verbs with agentive subjects allow *ne*; for example, verbs like 'come', 'go', and 'sleep' do not

⁵ But see Mohan (1994: 71, 72) for a dissenting judgment. It is also clear that familiar information structure distinctions are not a primary factor in the use of *ne* in Hindi. *Ne* is optional on the subject of 'cough' regardless of whether it is topic, focus, contrastive topic, etc. It seems that no information structure manipulation makes *ne* either forbidden or required with these verbs. In contrast, *ne* is obligatory on the subject of canonical transitive verbs with all these discourse functions (LISSIM 10 workshop).

Indo-Aryan languages might differ significantly in this respect. For example, in Assamese ergative seems to be used much more systematically on the subjects of unergative verbs but not with unaccusative verbs (LISSIM 10 workshop). A closer study of this language could be very valuable.

⁶ There are a handful of lexical exceptions, including the verbs *bolnaa* 'speak' and *laanaa* 'bring', probably for historical reasons (Mohan 1994: 71, Butt and King 2003). More systematically, there are transitive psych verbs with dative rather than ergative subjects; see section 3.1 for an analysis.

(Mohanán 1994: 71). None of this is what one would expect if *ne* is only, or even primarily, a marker of the agent thematic role.

One does better, I claim, by saying that *ne* is a dependent case marker, and then adding a little something to account for why it can appear also in sentences like (6). What is added could be an auxiliary rule that assigns ergative optionally to agentive NPs in some circumstances (essentially Butt and King's view), or the possibility that some unergative verbs can take null cognate objects that trigger dependent ergative case on the subject (my preference, as the simplest analysis within the terms of DCT⁷), or perhaps something else. The crucial point is that (2b) seems to have a role to play in Hindi, even if it may not be the whole story about ergative case assignment in this language. The fact that the presence of another NP in the same domain as the subject influences ergative case being assigned to the subject is enough to set up the tension with the DCT approach to DOM, which is my primary interest here.

2.2 Evidence that accusative is a dependent case in Hindi

One can also contemplate using the opposite strategy to eliminate the tension between the DCT account of ergativity and the DCT account of DOM in Hindi: one could maintain the DCT for ergative case marking, and seek a different kind of analysis of *ko*-marking on direct objects. And indeed, the DCT analysis of DOM proffered for Sakha is only one type supported by the recent literature.

However, it is unlikely that DOM in Hindi has a purely morphological account, in which accusative case is assigned to all direct objects in the syntax, but it is only spelled out by an overt morpheme at PF on some of them. This sort of treatment is very plausible for languages in which pronouns are marked accusative, but other NPs are not (e.g., Catalan (Aissen 2003: 451-452); many dialects of Basque (Odria 2014)). See also, Baker (2012: 268-269) for such an analysis of Amharic, where accusative is spelled out on items of category D, but not on elements of category N. This sort of morphological account is not very plausible for DOM in Hindi, however, because accusative *ko* can appear or not appear on the very same lexical item, such as *kitaab* in (5), partly repeated as (9).

- (9) a. Rahul kitaab paRh-taa thaa.
 Rahul.M book.F read-IPFV.M be.PST.M
 ‘Rahul used to read (a/the) book.’
- b. Rahul kitaab-ko paRh-taa thaa.
 Rahul.M book-ACC read-IPFV.M be.PST.M
 ‘Rahul used to read the book.’

Here the use of *ko* seems to be conditioned by the interpretation and/or position of the object, not by its intrinsic lexical or categorial properties.⁸

⁷ Saying that sound emission verbs like ‘cough’ ‘sneeze’ and ‘bark’ optionally take null cognate objects seems particularly plausible, where the cognate object names the sound emitted (cf. English *Chris sneezed a loud sneeze*). When present, the null cognate object triggers ergative on the subject by (2b), just as any other VP-internal NP would. Chandra, Kaur and Udaar (2017) propose just such a view for Punjabi. I do not know to what extent their arguments work in Hindi, however.

⁸ It is not outside the realm of possibility that *ko* could be morphologically conditioned by some covert category that distinguishes (9a) from (9b). For example, it is conceivable that there is a null definite determiner associated with

Perhaps, then, the most promising alternative to a DCT treatment would again be a more semantic one, stating the rule of *ko*-marking in terms of thematic role, in combination with semantic factors involving specificity/definiteness. Thus we can imagine something like (10).⁹

(10) *ko* marks theme arguments that are specific/definite.

But once again there is evidence that transitivity—the number of nominals in the clause—is more of a factor than thematic role.

One possible encouragement for (10) is that some dialects of Hindi allow *ko* to be used on the theme of passive verbs as well as transitive verbs, as in (11) (Bhatt 2007; see also Mohanan 1994: 94-96). What these arguments have in common, it seems, is their thematic role.

- (11) a. Is Tehnii-ko kal kaaT-aa gay-aa thaa.
 this.OBL branch-ACC yesterday cut-PFV.M PASS.PFV.M be.PST.M
 ‘The branch was cut yesterday.’
- b. Rina-ko baazaar-meN dekh-aa gay-aa thaa.
 Rina-ACC market-in see-PFV.M PASS.PFV.M be.PST.M
 ‘Rina had been seen in the market.’

These examples are possible problems for the DCT, and support for an alternative like (10).

But a closer look shows that thematic role (plus specificity) is clearly not the whole story. First of all, according to Bhatt (2007), *ko* is optional on the theme arguments of passives—even highly definite and animate NPs that require *ko* in corresponding actives. For example, (12b) is possible as well as (11b). This contrasts with what happens when the same NP, with the same kind of interpretation, is used as the object in a canonical transitive construction: then *ko* marking is strictly obligatory, as seen in (12a). This contrast takes us beyond the realm of pure thematic role plus specificity.

- (12) a. Ram-ne Rina-ko/*Rina baazaar-meN dekh-aa thaa.
 Ram-ERG Rina-ACC/*Rina bazaar-in see-PFV.M be.PST.M
 ‘Ram had seen Rina in the market.’
- b. Rina baazaar-meN dekh-ii gay-ii thii.
 Rina market-in see-PFV.F PASS-PFV.F be.PST.F
 ‘Rina had been seen in the market.’

Furthermore, the sole arguments of unaccusative verbs also count as theme arguments. A strict interpretation of (10), then, would imply that they could be marked with *ko*. But in fact, they cannot be, as shown in (13).

- (13) a. Anil-(*ko) gir-aa. (Mohanan 1994: 96)

the object in (9b) but not (9a), and this determiner conditions the spelling out of accusative as *ko*. I don’t see any attraction to this view for Hindi, though, in light of the other facts outlined in this section.

⁹ More precisely, this would be a possible rule for accusative *ko*. Hindi also has dative case *ko* associated with goals and experiencers, which is discussed in sections 3.1 and 3.4 below.

Anil-(*ACC) fall-PFV.M
'Ram fell.'

b. Anil-(*ko) piT-aa.
Anil-(*ACC) be.beaten-PFV.M
'Anil was beaten.'

c. Gilaas-(*ko) TuT-aa.
glass-(*ACC) break-PFV.M
'The glass broke.'

Overall, the distribution of *ko* marking on themes in Hindi is very similar to the distribution of accusative in Sakha, for which Baker and Vinokurova (2010) propose a DCT approach (see also Levin and Preminger 2015). The crucial observation is that passive clauses have an implicit agent, and as such they can be intermediate between a canonical transitive construction and a canonical unaccusative construction. The contrast between (13) and (12a) shows that transitivity—whether another nominal is present in the domain—is highly relevant to *ko* marking. Then the fact that passives like (11) and (12b) are an intermediate case, with *ko* optional, follows from the fact that they have an agent present, but only as an implicit argument, not as an overt, fully-featured NP. One could either say that this implicit agent is only optionally represented in the syntax (Baker and Vinokurova's proposal for Sakha), or that it is always present but it is optional whether the theme argument moves above it to Spec TP before dependent case assignment applies (a version of Bhatt's (2007) proposal). All things considered, this fuller range of data supports the DCT for *ko*, rather than an alternative like (10). See also Butt and King (2003), who crucially refer to the grammatical function object in their lexical entry for *ko*, not just to thematic role plus specificity.

The DCT approach in which object shift feeds dependent case marking of the object is also a good fit for Hindi DOM in other respects. Thus, *ko*-marked objects differ in word order from bare objects in the expected way, according to Bhatt and Anagnostopoulou (1996). *Ko*-marked objects come before a goal argument, whereas bare objects come after it, as in (14). (14a) and (14b) thus differ in word order, and (14c) is unambiguous, meaning that Bill is the theme and Lila the goal, not the other way around.¹⁰

- (14) a. Ram-ne Anita-ko chiTThii bhej-ii.
Ram-ERG Anita-DAT letter.F send-PFV.F
'Ram sent a/the letter to Anita.'
- b. Ram-ne chiTThii-ko Anita-ko bhej-aa.
Ram-ERG letter.F-ACC Anita-DAT send-PFV.M
'Ram sent the letter to Anita.'
- c. Ram-ne Bill-ko Lila-ko di-yaa.
Ram-ERG Bill-ACC Lila-DAT give-PFV.M
'Ram gave Bill to Lila.' *Not*: 'Ram gave Lila to Bill.'

¹⁰ However, examples like (14b,c), with two *ko* marked objects, are reported to be bad in the varieties described by Mohanan (1994:85). I do not try to account for this apparent difference here.

This fits well if the dative NP marks roughly the left edge of VP. Then the object gets accusative case if and only if it moves outside of VP, to a position before that of the goal. As such, the data in (14) is analogous to the Sakha data in (3), as analyzed by Baker and Vinokurova (2010), although the type of constituent used to reveal the object movement is a bit different.¹¹

Finally, Hindi is also like Turkic languages (at least Turkish) in that it does not allow a *ko*-marked object to be coordinated with a bare object (Kalin and Weisser 2019: 667; see also Mohanan 1994: 90).¹²

- (15) ???/*Vo shikaari [sher-ko or hiran] maar degaa.
 that hunter tiger-ACC and deer kill give.FUT.3.SG
 ‘The hunter will kill the tiger and a deer.’

This restriction is expected if DOM involves movement of the object in this language, as per the DCT. In a coordinate NP, either both the coordinands move out of VP together and are *ko*-marked, or both stay inside VP together and are not *ko*-marked. Moving only one of them into the domain where *ko*-marking happens is barred by the Coordinate Structure Constraint. (In contrast, languages in which DOM is due to accusative case being spelled out overtly on some nominals but not others, like Amharic, often allow this kind of asymmetrical conjunction, as Kalin and Weisser show.)

Before moving on to the next stage of the inquiry, I note that, although the relevance of transitivity to *ko*-marking of theme arguments seems clear, the relationship of *ko*-marking to specificity may not be as straightforward as some previous generative literature has suggested. Veneeta Dayal (personal communication) points out that there are certain quantified expressions in Hindi that are nonspecific indefinite in meaning but nevertheless allow, and even require *ko*-marking. Two examples are:

- (16) a. Kisii-na-kisii laRkii-ko Anu hameshaa cuun-tii hai.
 some-not-some girl-ACC Anu always choose-IPFV.F be
 ‘Anu always chooses some girl or other.’
- b. Anu-ne kisii-ko (bhii) nahiiN dekh-aa
 Anu-ERG someone-ACC (Free Choice) not saw-PFV.M
 ‘Anu didn’t see anyone (at all).’

Pending a fuller investigation, I assume that these examples point to complications in the relationship between specificity and movement out of the VP (Diesing’s Mapping Hypothesis), rather than to complications in the relationship between movement out of the VP and dependent case marking. Along these lines, one could say that simple nominals move out of VP for Diesing-type reasons, whereas nominals with these special quantifiers move out of VP for different reasons, perhaps related to scope-taking. The two sorts of object movement could be

¹¹ Apparently the judgments for sentences that use VP-adverbs as landmarks are rather murky, perhaps because of questions about the syntax of adverbs in Hindi. Goal arguments do have the same interaction with DOM that VP-adverbs do in Sakha (Baker and Vinokurova 2010: 602-603).

¹² Miriam Butt (p.c.) did not find sentences like (15) so bad, but the discussants at LISSIM 10 generally didn’t like them.

akin to the A/A-bar distinction: (16) could have an A-bar type of object movement that reconstructs at LF for the calculation of specificity. However, any sort of movement out of VP to a position below the subject prior to spell out should be enough to trigger dependent case marking of *ko*, given my assumptions (see Baker (2015: 266) on both A and A-bar movement feeding accusative case assignment in Sakha). This sort of data, then, is not a reason to avoid a DCT approach to *ko*.¹³

I conclude that, if one is receptive to the charms of dependent case assignment at all, one wants to use it for Hindi too. On the one hand, if one accepts the DCT as a good theory for ergative languages like Shipibo, similar considerations lead one adopt it for ergative marking in Hindi. On the other hand, if one accepts the DCT as a good theory of DOM in languages like Turkish/Sakha, then one probably wants it for DOM in Hindi too. The question raised in section 1 is thus an important one: how can these analyses both be true in the same language?

3. Reconciling the Two DCT Analyses

3.1 A window of opportunity: different case in different domains

In fact, there is a little theoretical space in which the DCT can operate to address this issue. Consider again the simple accusative and ergative case rules in (2), repeated as (17).

- (17) a. If NP1 c-commands NP2 in the same domain, then assign NP2 accusative.
 b. If NP1 c-commands NP2 in the same domain, then assign NP1 ergative.

(17a) and (17b) are not direct converses of one another *if* the domains that they refer to are different. If one says that ergative case assignment and accusative case assignment must always happen in the very same domain, such as TP, then it is difficult to avoid the conclusion that the object will be accusative if and only if the subject is ergative. That derives the direct relationship between the two dependent cases seen in Nez Perce and Diyari, but not the independence between them seen in Hindi and similar languages. However, it could be that ergative and accusative are assigned in slightly different domains in some languages. This opens up a bit of room for the two cases to go their separate ways in some circumstances.

The idea that different cases can be assigned in different domains is already a component of DCT, apart from this issue. Marantz (1991) originally proposed that the unmarked/default case can differ across domains. For example, it might be nominative in a clausal domain, but genitive in a nominal domain. This can be seen internal to Hindi, where the sole argument in a clause is unmarked/nominative ((18a)) but the sole argument in a nominal—including one headed by a nominal/infinitival verb form—is genitive, as seen in (18b) (Mohanana 1994: 60, 78).

- (18) a. Baccaa kamre-meN baiTh-aa hai.
 child.NOM room-in sit-PFV.M be.PRS
 ‘The child is sitting in the room.’

¹³ Dayal also challenges the Diesing-style approach to DOM in Hindi from the other direction, pointing out that inanimate NPs that do not bear *ko* can nevertheless get a definite interpretation as well as a nonspecific indefinite interpretation, as can be seen in (5a,c) from Bhatt (2005); see also Mohanana (1994: 80). I tentatively assume that this is just a surface-morphological fact: accusative case can be expounded as \emptyset as well as *ko* on inanimate nouns.

- b. [Raam-ke baiT^h-ne]-par maaN-ne us-ko khaanaa diy-aa.
 Ram-GEN sit-INF-at mother-ERG him-DAT food.M give-PFV.M
 ‘When Ram sat down, mother gave him food.’ (Lit. ‘At Ram’s sitting...’)

In Baker (2015), I extended this to the claim that the dependent cases may (or may not) vary from domain to domain as well. For example, ergative case is assigned to the higher of two NPs in a clausal domain. In some languages, like Shipibo or Burushaski, ergative case can also be assigned to the higher of two NPs in a DP domain—to a possessor in Spec DP/PossP, which c-commands the NP complement of D (the possessum). However, it is equally possible for the case assigned to a high NP inside DP to be different from the case assigned to a high NP inside a clause; this results in a genitive case distinct from ergative. Along the same lines, I argued that dative in some languages is a structural case assigned to the higher of two NPs in a VP domain, as opposed to ergative assigned to the higher of two NPs in a clausal (TP) domain.

Indeed, there is evidence that Hindi is this sort of language, with the minor complication that dative case is *ko*, homophonous with the accusative-DOM marker *ko*, presumably for historical reasons.¹⁴ (See Mohanan (1994: 91-98), among many others, for arguments that the two cases are grammatically distinct. For example, *ko* marking with goal arguments does not depend on the animacy and specificity of the argument the way it does with themes, and *ko* marking on goal arguments is not lost in passive clauses the way it can be on theme arguments.) One piece of evidence for this is that dative *ko* appears systematically on the higher of two objects of a ditransitive verb, as in (14) and (19).

- (19) Ilaa-ne maaN-ko yah haar diy-aa. (Mohanan 1994: 85)
 Ila-ERG mother-DAT this necklace give-PFV.M
 ‘Ila gave this necklace to mother.’

There are apparently no triadic predicates in Hindi in which the higher goal argument can be in nominative case or structural accusative case, compatible with the view that dative is always assigned in this structure. Dative marking is also found on the experiencer/possessor argument of certain dyadic verbs, as seen in (20).

- (20) a. TuSaar-ko caand dik^h-aa. (Mohanan 1994: 141)
 Tushar-DAT moon.M see/appear-PFV.M
 ‘Tushar saw the moon.’

¹⁴ DCT can perhaps contribute some insight into why dative case is the historical source for a DOM accusative case in many languages—including Basque ((6)) and Spanish as well as Hindi. True structural dative case is most canonically seen on the goal arguments of ditransitive verbs like ‘give’ or ‘send’, as in (19). These are structurally “middle” arguments: they are lower than the agent-subject, but higher than the theme-object. Therefore, children looking at this kind of data with DCT as part of their UG face an indeterminacy in the data: is the goal *ko*-marked because it c-commands the theme, or because the agent c-commands it? For true dative case marking, the first interpretation is the right one, as shown by experiencer predicates like those in (20), which have a goal/experiencer argument and a theme argument but no agent argument. But children who do not take in this type of data right away, or do not connect it to ditransitives, can perfectly well think that *ko* is assigned to the goal because it is c-commanded by the agent in the same spell out domain. Those who internalize this rule instead of or in addition to the dative rule proper will be inclined to apply it to shifted theme arguments as well as to goal arguments, resulting in DOM where the accusative marker is cognate with the dative marker.

- b. TuSaar-ko kitaab mil-ii.
 Tushar-DAT book.F receive-PFV.F
 ‘Tushar received a book.’

These can be seen as having two NPs inside VP, just as (19) does, with the higher one being marked dative; the only difference is that (19) has a third argument in Spec vP whereas (20) does not. Now some languages, like Icelandic, also have monadic psych predicates like ‘X feels cold’ whose sole argument bears dative case (Sigurðsson 2002: 692)—but Hindi evidently does not (Butt et al. 2006: 6-7, 14; Mohanan 1994: section 7.1). This gap in the range of predicates that have dative experiencer subjects is expected if dative is a dependent case in Hindi. Especially striking are state-denoting predicates in Hindi. When the state is expressed by an adjective, the subject must be nominative, not dative, as in (21a). In contrast, when the state is expressed by a nominal, the experiencer must be dative, not nominative, as in (21b). Near minimal pairs exist, as in the two forms of ‘Ram is sick’ (Dayal p.c. and Alok p.c.; see also Mohanan 1994: 141-146; Butt et al. 2006: 6.)

- (21) a. Ram-(*ko) bimaar hai .
 Ram-(*DAT) sick be.PRS.3.SG
 ‘Ram is sick.’
- b. Ram-ko bukhar/bimaar-i hai
 Ram-DAT fever/sick-NMLZ be.PRS.3.SG
 ‘Ram is feverish/sick, Ram has a fever/sickness.’

This pattern also follows from saying that dative in Hindi is a structural case assigned to the higher of two NPs within VP, much as ergative is assigned to the higher of two NPs within TP. That condition is satisfied in (21b) given that *bukhar* ‘fever’ and *bimaar-i* ‘sickness’ are NPs, whereas it is not satisfied in (21a) given that *bimaar* ‘sick’ is an AP. (21) also strongly suggests that dative case is not consistently an inherent case assigned to experiencer arguments, or an idiosyncratic case determined by the lexical entry of particular verbs (contrary to Davison 2004).

This confirms that different dependent cases can be assigned in different spell out domains. With this in mind, we can try to use the idea of dependent cases being keyed to particular spell out domains more aggressively, to address the paradox outlined in section 1. Suppose that what is special about Hindi and similar languages is that they have another possible phase head in the clause, in addition to C and v. I tentatively assume that this third phase head is Aspect, which clearly plays a role in Hindi’s split ergativity. Like other phase heads, Aspect can specify a particular suite of configurational cases for its complement. Then the overall picture could be as outlined in (22).

- (22) a. Phase head v:
 high dep’t case: Dat (*ko*), low dep’t case: none, unmarked case: Nom (\emptyset)
- b. Phase head Asp:
 high dep’t case: Erg (*ne*), low dep’t case: none, unmarked case: Nom (\emptyset)
- c. Phase head C:
 high dep’t case: none, Low dep’t case: Acc (*ko*), unmarked case: Nom (\emptyset)

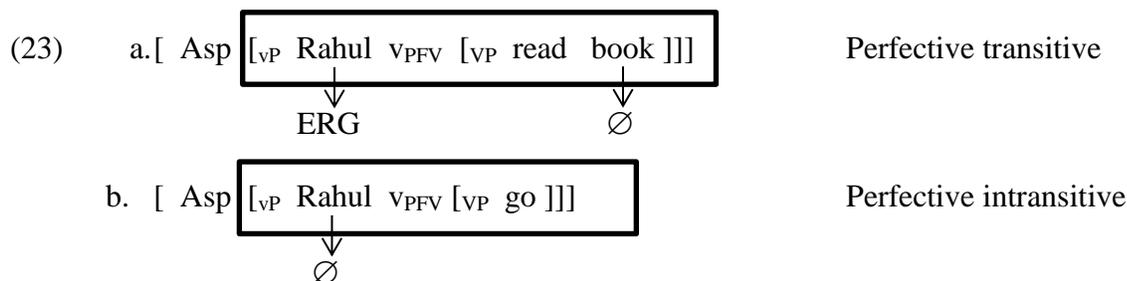
This opens up some space to say that accusative and ergative are both dependent cases, but they are independent of each other because they apply in different domains.

3.2 DOM in ergative clauses

Even with (22) in hand as theoretical option, it is not trivial to work out the details properly. I attempt to do so in two stages. First I concentrate on clauses in which ergative case is assigned: perfective clauses in Hindi, as well as any clause in Elgoibar Basque. Then I discuss what needs to be done to add the nonergative imperfective clauses in Hindi into the picture.

In a uniformly ergative language or construction, even a nonspecific object that stays inside VP triggers ergative case on the subject. Therefore, *v* must not be a “hard” phase head in these languages or constructions, such that its VP complement including the object is removed from the derivation and hence invisible to the subject. It is tempting to say that *v* is not a phase head at all in these clauses, but that cannot be quite right, because dative case is assigned in an example like (19). Therefore, VP is a case domain, but not one that hides the object from the subject. It is for reasons like this that Baker (2015: 146-152) introduces the notion of a soft phase head (similar to Chomsky’s (2001) weak phase head). Let us assume, then, that *v* is always a soft phase head in Basque, and in perfective clauses in Hindi.

Looking past *v*, the next phase head to consider is Aspect, which (by hypothesis) triggers the spell out of its vP complement. This complement includes the subject in Spec vP and the object inside VP, if any. High dependent case, namely ergative, is assigned at this point, by (22b). Therefore, the subject is ergative if and only if there is in fact an object inside VP, as shown in (23) (this possibly includes a null cognate object for a verb like ‘cough’ in Hindi; see fn. 7). Once ergative case is assigned to the subject, it is never unassigned, so what happens later when TP is spelled out will not change this.



The last phase head to consider is C, which triggers the spell out of its TP complement. It is at this stage that we want to layer in the DOM piece. Starting from (23a), the result we want is for the object to turn out accusative if and only if it undergoes specificity-related object shift out of the verb phrase. First consider the nonspecific object, which does not undergo object shift. We get the right result if the object is not in the TP domain when it is spelled out. It will not be available in TP if it has already been spelled out on a previous phase associated with a hard phase head. We have crucially assumed that *v*P is not a hard phase head in these languages/constructions, but Aspect presumably is. The subject may raise out of vP to Spec TP for EPP reasons, but the nonspecific object does not. As a result, at most one NP is visible inside TP when TP is spelled out. Therefore, the accusative case rule stated in (22c) does not apply. Rather, the object gets unmarked nominative case at the spell out of vP by (22b). (24) thus summarizes the derivation of the ergative-nominative pattern in (5c).

- (24) [TP Rahul-ERG T [AspP -- Asp [vP -- v_{PFV} [VP read book]]] Perfective nonspecific
 ACC: not applicable

Now suppose that the object is specific, and as such it moves at least out of VP. In fact, I must assume that it moves all the way out of vP, into the domain of Asp. Crucially, however, it does not move as high as the final position of the subject, in Spec TP. Now when TP is spelled out, it contains two NPs, so the lower one is assigned accusative case. This gives the ergative-accusative pattern seen in (5b).

- (25) [TP Rahul-ERG T [book Asp [vP -- v-PERF [VP read --]]]] Perfective specific
 ↓
 ACC

This harmonizes the assignment of ergative case (in vP) with the assignment of accusative case (in TP), giving us the core result we were aiming for. We will, however, have to revisit this derivation in section 3.4, to address an issue involving another feature of my (2015) theory of case assignment.

3.3 DOM in nonergative clauses in a split ergative language

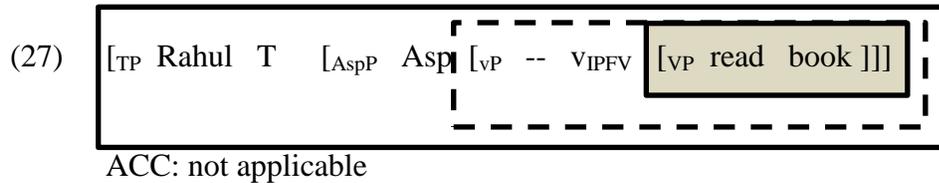
First, however, let us take into account the split ergativity of Hindi (and Vafsi). Why is the subject marked differently in imperfective clauses in these languages, and how is it that object-shift-related DOM is still possible in those clauses?

One fairly standard idea about split ergativity (Baker 2015, Coon and Preminger 2017, Atlamaz and Baker 2018, etc.) is that there is (hard) phase boundary between the subject and the object in imperfective clauses in a language like Hindi that is not there in perfective clauses. The head *v* is in the right spot to do this job. One key part of the account, then, is that the phase status of *v* varies across clauses: *v*-imperfective is a hard phase head, eliminating the contents of VP from the representation, whereas *v*-perfective is a soft phase head, triggering case marking of the contents of VP (and other PF-facing properties, such as word order; cf. Fox and Pesetsky 2004) but not removing them from the representation. For both the Indo-Aryan languages and the Iranian languages, this seems to be related to the fact that the perfective verb is historically a passive participle of some kind, and passive *v* is a weak phase head rather than a strong phase head in Chomsky's (2001) terms. What this means is that, when there is no object shift, the object is spelled out with VP in imperfective clauses and becomes invisible to the subject first-merged in Spec vP. Then when Asp is merged with vP and triggers spell out of its vP complement in Hindi, the ergative rule in (22b) does not apply, and the subject is uniformly nominative, as in (26) (but see below for a partial revision).

- (26) [Asp [vP Rahul v_{IPFV} [VP go / read book]]]

∅

Next we follow the derivation to the C-TP level, looking to add the DOM component in a way that is parallel to how DOM works in ergative clauses. For the case of the nonspecific object, this is straightforward. The object is inside the spelled out VP domain and stays there throughout. It was not visible when vP was spelled out, so the subject is not ergative. For the same reason, it is not visible when TP is spelled out either, so the object does not undergo accusative assignment at that point. Instead, it got nominative case when VP was spelled out, as the only nominal in that domain, by (22a). As a result, both the subject and the object show up with unmarked nominative case in this situation, as in (5a). The derivation is sketched in (27).



However, there is a complication when we come to imperfective clauses with a specific object that undergoes object shift out of VP. The outcome to aim for is that the object shifts out of VP and vP so that it is visible when TP is spelled out, as is the subject raised to Spec TP. The result would be that the object is marked accusative, similar to what happens in (25). But there is an issue with phase theory that needs to be dealt with. In the derivation being imagined, the object is invisible at the spell out of the vP complement of Asp, so ergative case does not apply to the subject, but the object is visible again at the spell out of TP, so that accusative case does apply to it. But visibility is usually understood as being the result of the element in question being removed from the representation, shipped off to the interfaces and never to be seen again in the syntax. The usual way for the object to survive the spell out of VP (if v is a hard phase head, as it is here by hypothesis) is for it to move out of VP before VP is spelled out. That is normally a precondition for it to be available at the spell out of TP. But this also means that it is available at the spell out of AspP. If that is true, then it should trigger ergative case on the subject after all, contrary to fact in Hindi (and Vafsi).¹⁵ So some revision is needed here.

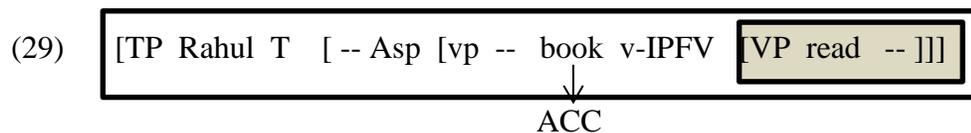
The simplest solution is to revise our assumption that Asp is always a phase head in Hindi. Instead, let's assume that the phase status of Asp varies, as the phase status of v does in this approach to split ergativity. In particular, suppose that Asp-perfective is a hard phase head, as before, but Asp-imperfective is not a phase head. This points toward a picture in which there is always exactly one hard phase head internal to the clause (below C) in Hindi, but which it is varies, as in (28).

- (28) a. In Hindi perfective clauses, Asp is a hard phase head (but v is not).
 b. In Hindi imperfective clauses, v is a hard phase head (but Asp is not).

Now the crucial derivation goes as follows. The specific object shifts out of VP before VP is spelled out. It is now c-commanded by the subject inside vP, but ergative case does not apply since this sort of Asp does not trigger the spell out of vP. This makes the case rule in (22b) moot. The subject moves on to Spec TP, guaranteeing that it is higher than the shifted object. TP is

¹⁵ Or perhaps the shifted object could land above the subject in Spec vP. In that case, it is the shifted object that should get ergative case at the spell out of vP—an even worse result.

always spelled out (C is always a hard phase head), and now there are two NPs in TP at that point, so the lower one is marked accusative by (22c). The result is the nominative-accusative pattern seen in (5d). The derivation is summarized in (29).



This squares my leading idea with standard phase theory, at the cost of saying that Asp, like v, varies in its status as a phase head in Hindi.

We now have to revisit the derivation in (27), to make sure that it still works in light of the revised status of the Aspect head ((28)). In fact, the derivation is unaffected, as long as we maintain the idea that v is a hard phase head in imperfective clauses. That is enough to hide the object from the subject at the spell out of TP, so that accusative case does not apply to the object, but nominative case assignment does. Thus, the dashed box in (27) does not have to be invisible to the outside world, as long as the solid box around VP is. What would not work would be saying that neither Asp nor v is a hard phase head in imperfective clauses; if that were true, the object would come out as accusative even if it did not shift out of the smallest VP constituent, contrary to fact. But as long as one of Asp and v is always a hard phase head, as (28) says, the result that unshifted objects are not marked accusative in Hindi holds true. The hard phasehood of v-imperfective is no longer needed to block ergative assignment to the subject if Asp-imperfective is not a phase head, but it is needed to block accusative assignment to the unshifted object. This completes a basic DCT account of the four-way alignment pattern in Hindi in (5) from section 1.

3.4 On the absence of DOM with dative subject predicates

Finally, we need to return to a loose end concerning (25), the derivation of a sentence with an ergative subject and a definite/specific object marked with accusative case. Because the subject raises to Spec of TP and the object undergoes object shift outside of the vP complement of Aspect, the subject c-commands the object when the TP complement of C is spelled out. That seems to be enough for accusative case to be assigned to the object, by (22c). But there is a complication. In Baker (2015: 233), I proposed a kind of “Strict Cycle” condition on the calculation of dependent cases, stating that “only new c-command relationships are considered at later spell outs.” This condition can be stated more fully as in (30).

- (30) If NP1 c-commands NP2 at the spell out of XP, and NP1 also c-commands NP2 at the later spell out of YP, this c-command relationship is not considered for purposes of case assignment in YP.

(30) then wrongly blocks the assignment of accusative to the object in (25). The subject c-commands the object at the spell out of vP, and necessarily so; that is why the subject is assigned ergative case in the first place. Therefore, the relationship of the subject c-commanding the object should not be considered again at the spell out of TP, and the object should not be assigned accusative case after all. And yet it is. (I thank Rahul Balusu for pointing out this contradiction in my analysis at LISSIM 10.)

It is tempting to say that I was simply wrong about (30). that we should not complicate the grammar in this way. But I did not introduce (30) for no reason, and indeed the need for something like (30) is close at hand, lurking in the materials we have discussed in Hindi. Recall that dative case in Hindi is also a high dependent case: it is assigned to the higher of two NPs in a VP domain, just as ergative is assigned to the higher of two NPs in vP (see (19)-(22)). This happens with, for example, dyadic psych verbs, as seen again in (31).

- (31) a. Ilaa-ko Anu-(*ko) dik^h-ii. (Mohanani 1994: 96-97; also Alok, p.c., Dayal, p.c.)
 Ila-DAT Anu-ACC see/appear-PFV.F
 ‘Ila saw Anu.’
- b. Mujhe park-me yeh ghaRii-(*ko) mil-ii
 I.DAT park-in this watch-(*ACC) find -PFV.F
 ‘I found this watch in the park.’

But a relevant further fact about these sentences is that they do *not* show DOM: the theme argument must be nominative, even when it is animate and/or definite/specific, the sort of argument that requires *ko*-marking in transitive clauses with ergative subjects. Why this difference?

This issue is raised clearly by Davison (2004). Her answer hinges on the assumption that dative in Hindi is a lexical case, whereas ergative case is a structural one, and NPs bearing lexical case do not trigger accusative case on their coarguments; see also Marantz’s (1991) analysis of dative-nominative clauses in Icelandic, building on Yip et al. (1987)).¹⁶ But this familiar idea does not work given that dative case is really a structural dependent case, hence theoretically on a par with ergative case.¹⁷

Data like (31) (in other languages) prompted me to pursue a different sort of explanation for the absence of accusative case on the lower argument of dyadic unaccusatives. Because both arguments are internal to the VP complement of *v*, the first time that the goal argument c-commands the theme argument is at the spell-out of VP, and accusative case is simply not assigned in the VP domain in Hindi (or Icelandic), as stated already in (22a). So in part (31) is simply a further testimony to the fact that different structural cases are assigned in different spell out domains, as discussed in section 3.1. However, a bit more needs to be said to make sure that accusative case assignment does not sneak in through a back door. Granted that accusative case is not assigned at the spell out of VP, it is still possible for both the experiencer argument and the theme argument to be present at the spell out of TP. This will happen when *v* is a weak phase head, as in Hindi perfective aspect clauses, or when both arguments move to the edge of the vP phase and then perhaps higher up. One still needs to say why the theme argument doesn’t get accusative case by virtue of being c-commanded by the experiencer argument on this later cycle. That is why I proposed the Strict Cycle condition on the calculation of dependent cases in (30). First VP is spelled out in (31), triggered by phase head *v*. The experiencer c-commands the

¹⁶ Davison couches her explanation in a theory where case is assigned by functional heads like *v*, not in DCT, however.

¹⁷ Note that ergative subjects and dative subjects are also alike in that they have similar grammatical subject properties, such as anteceding reflexives and controlling into adjunct clauses, as shown by Mohanani (1994) and Davison (2004). Nor does it work to say that DOM in (31) is ruled out because a clause cannot have two arguments marked by *ko*; Mohanani (1994: 97) observes that this is falsified by sentences with modal auxiliaries that have dative subjects but can also have a direct object marked by *ko*. See also (14b,c), which are allowed in Bhatt’s dialect.

theme, so dative is assigned to the experiencer in Hindi, but accusative is not available at this stage ((22a)). Then when it comes time to spell out TP, the c-command relationship between experiencer and theme has already been considered, so it is not reconsidered for dependent case marking at that later stage.

(30) is therefore a valuable part of a full explanation for why DOM is not possible in dative subject structures like (31). But it problematizes the account of ergative subject structures like (5b), because it also blocks accusative case to the shifted object in (25), as discussed above. We need to find a way between Scylla and Charybdis here.

For current purposes, I will be content to address this problem in a somewhat mechanical way, replacing (30) with the formulation in (32).

(32) *If NP1 and NP2 are both spelled out for the first time in domain XP and NP1 c-commands NP2 in XP, then NP1 c-commanding NP2 in a later spell out YP is not considered for purposes of case assignment in YP.*

The idea here is that only a c-command relationship between two NPs that is established on the very first cycle involving those NPs creates a Strict Cycle effect that suppresses case marking later on. The intuition is that that first domain, VP, is a bit special in that it is most likely to contain multiple arguments, given the way that phrase structure is built in current Chomskian theories. As a result, there is some pressure not to allow tampering with cases assigned at that level. The italicized condition in (32) is satisfied in psych constructions like (31), where the experiencer and the goal are both spelled out for the first time in VP. Therefore, the experiencer c-commanding the theme does not license the theme getting accusative later in the derivation. In contrast, the italicized condition in (32) is not satisfied in the normal agentive transitive clause in (25), because the theme argument is spelled out for the first time in VP, whereas the agent argument is spelled out for the first time in vP. Therefore, the agent c-commanding the theme does count for purposes of accusative assignment to the theme at the spell out of TP in (25), as well as for purposes of ergative assignment to the agent at the spell out of vP.

There is a stipulative aspect to this analysis, but also a potentially explanatory aspect. I admit that it is not obvious why my strict cycle condition should be generalized from the two-cycle derivations I considered in Baker (2015) to the three-cycle derivations considered here in the way described in (32) rather than in the way described in (30). Hopefully, deepening insight into how “derivations by phase” work will shed further conceptual light on this (or reveal a better alternative). But the foundation of this account is a widely held intuition about how psych predicates are different from agentive transitive predicates in Hindi and other languages. Thus, Mohanan (1994) also analyzes psych predicates but not agentive ones as dyadic unaccusatives, and—in a framework closer to my own—Davison (2004) analyzes agents as being generated in Spec vP but experiencers as being generated in VP. Davison uses this to explain the fact that agents strictly dominate theme arguments and are unambiguously the subject of the clause, whereas experiencer/goal arguments and theme arguments are equidistant from the Spec TP position, and therefore what counts as the subject in these clauses is subject to some variation in Hindi. This idea that goals and themes are structurally closer than agents and themes is at the heart of my analysis too. Therefore, it should be possible to link up my account of the case theoretic differences between agentive clauses and psych clauses with their independently known differences in terms of subject properties (Davison 2004), their different scopal behaviors (Anand and Nevins 2006: 13), and so on. In that respect, my account can aspire to having a

degree of explanatory power—even though I do not fill in the steps needed to fully connect these various phenomena here.

5. Conclusion

The fundamental question addressed in this chapter is how is it possible, given the core tenets of dependent case theory, for a language to have an ergative subject when the object is not accusative, or for it to have an accusative object when the subject is not ergative—both of which happen in Hindi given the right combination of a transitive verb, perfective or imperfective aspect, and a specific or nonspecific object. I argued that this independence by itself is not sufficient reason to doubt that both ergative and accusative case in Hindi are dependent cases. Rather, it is an effect of the two cases being assigned in different domains (vP and TP). It is thus possible for both NPs to be present in one of the domains but not the other. I also extended these ideas to dative case in Hindi, which is a dependent case assigned in yet a different domain (VP).

In general, I acknowledge that assumptions other than the ones I have used to fill out my account might be possible, depending on one's exact views about the Phase Impenetrability Condition, what makes something a phase head, exactly how object shift happens, and so on. My main concern here is not to firmly resolve these abstract theoretical matters. Rather my primary goal is simply to give a kind of proof by construction to show that a DCT analysis of split ergativity is compatible with a DCT analysis of DOM, even where the conditioning factors vary independently. This can be done at the modest cost of saying that Aspect is sometimes a domain-creating phase head, alongside v and C, together with the idea that different structural cases are assigned in different spell-out domains, for which there is plenty of independent evidence.

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Abbreviations: Abbreviations in the glosses follow the Leipzig glossing conventions. They include: ACC, accusative; ASP, aspect; AUX, auxiliary; DAT, dative; DCT, dependent case theory; DEST, destinative; ERG, ergative; F, feminine; FUT, future; GEN, genitive; INF, infinitive; IPFV, imperfective; LOC, locative; M, masculine; NMLZ, nominalizer; NOM, nominative; OBJ, object; OBL, oblique; PASS, passive; PFV, perfective; PL, plural; PRS, present; PRT, (evidential) particle; PST, past; SG, singular.

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