

Person agreement with inherent case DPs in Chirag Dargwa*

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Abstract The article argues that the syntactic behavior of non-absolute subjects of finite clauses in the Nakh-Daghestanian language Chirag Dargwa is a result of their interaction with two different functional heads in a clause: ν and T. Discussing empirical data from Chirag, I present the puzzling behavior of person agreement, which shows selective sensitivity to arguments in the ergative, dative, and genitive cases. The primary evidence comes from the periphrastic causative, which displays some typologically unusual properties in case marking and agreement. I show that the ability to trigger person agreement is not an intrinsic property of ergative, dative, and genitive DPs in Chirag, but rather is endowed to the highest DP in T's c-command domain over the course of the derivation. I propose that all non-absolute subjects start out as DPs assigned inherent case and a theta-role by ν , and that T further assigns structural nominative case to the DP in Spec, ν P, thus making it accessible to ϕ -probes.

Keywords: ergativity, case, agreement, Nakh-Daghestanian, Chirag Dargwa

1 Introduction

The relationship between case and agreement is notoriously complicated. The standard Minimalist wisdom has it that both phenomena are a reflection of the probe–goal relation established between two structural loci in phrase structure—the probe residing on a clausal functional head that needs to value certain ϕ -features and the goal DP having the necessary ϕ -features—by means of the operation Agree (Chomsky 2000, 2001). The probe scans its c-command domain in search of a suitable goal and, when this is found, establishes an Agree relation with it, whereby the functional head receives valued ϕ -features from the goal and simultaneously assigns case to it. Case is thus thought of as a result of the need of the functional head to acquire agreement features.

However, there is ample evidence that this is not the only modality of agreement in human language. For example, Baker (2015) discusses some phenomena that indicate that case assignment to a DP can be dissociated from agreement, as evidenced by the absence of agreement in many languages with morphological case, by the relationship between accusative case assignment and object agreement, or by ergative case assignment to the transitive subject in morphologically ergative languages. In fact, as Bobaljik (2008) discusses, in some languages agreement with a DP can be shown to also depend on the case of that DP rather than solely its structural position relative to the agreeing functional head, the

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The abbreviations here follow the Leipzig Glossing Rules (<https://www.eva.mpg.de/lingua/resources/glossing-rules.php>), with the following additions: AD – location ‘near’, ANTE – location ‘in front of’, AOR – aorist, ATR – attributive, CAUS – causative verb, ELAT – movement away, EQ – embedded question, IMM.FUT – immediate future, IN – location ‘inside a hollow space’, INTER – location ‘inside a mass’, IPF – imperfective stem, LV – light verb, OBL – oblique stem suffix, PF – perfective stem, POST – location ‘behind’, PV – spatial prefix, SUPER – location ‘on’.

property that Preminger (2014) dubs *case discrimination*. For example, in Hindi, only the unmarked nominative is eligible as an agreement controller, whereas marked ergative, accusative, and dative cases are not. Combined with the closest c-command condition, this restriction predicts that in a clause with two arguments, the actual controller of agreement will be determined based on the case marking of the two arguments. Indeed, patterns of Hindi agreement corroborate this prediction, as can be seen in (1) cited from Bobaljik (2008: 309; glosses adapted).

- (1) a. *siitaa* *kelaa* *khaatii* *thii*
 Sita[F.SG](NOM) banana[M.SG](NOM) eat.IPF.F.SG be.PST.F.SG
 ‘Sita (habitually) ate bananas.’
- b. *niina* *bacce-ko* *uthaayegii*
 Nina[F.SG](NOM) child-ACC lift.FUT.F.SG
 ‘Nina will pick the child up.’
- c. *raam-ne* *roṭii* *khaayii* *thii*
 Ram[M.SG]-ERG bread[F.SG](NOM) eat.PF.F.SG be.PST.F.SG
 ‘Ram had eaten bread.’
- d. *siitaa-ne* *larkii-ko* *dekhaa*
 Sita[F.SG]-ERG girl[F.SG]-ACC see.PF.M.SG
 ‘Sita saw the girl.’

In imperfective transitive clauses, the subject is in the nominative and obligatorily controls agreement regardless of whether the direct object is also in the nominative, as in (1a), or in the accusative, as in (1b). In perfective transitive clauses, the subject is in the ergative and the direct object is in the nominative. Since only nominative arguments are specified as agreeing in Hindi, it is the nominative direct object that triggers agreement on the finite verb in such sentences, as shown in (1c). Finally, in perfective transitive clauses where the direct object is additionally marked with accusative case, as in (1d), the verb carries default agreement.

Furthermore, the case assignment procedure described above is only operative in structural case, whereas inherent case is assumed to be assigned directly by lexical heads, with no need to involve Agree and, hence, no morphological agreement. Meanwhile, many languages are known for exhibiting agreement not only with structural-case DPs, but also inherent-case DPs (Rezac 2008). The case-discriminating behavior of agreement thus provokes the question as to what determines the ability of DPs in a certain inherent case to trigger agreement. Often, the ability to agree is conceived of as a primitive rather than following from some other syntactic properties. Bobaljik (2008), for instance, simply identifies DPs in a given morphological case in a given language as accessible or inaccessible, with the agreement behavior of DPs in different cases assumed to obey the hierarchy *unmarked* > *marked* > *lexical*. A DP in any case is thus in principle allowed to trigger verbal agreement as long as the hierarchy is not violated. Even though unmarked case in languages with agreement does normally agree, nothing in the syntax of marked and, especially, inherent/lexical cases seems to correlate with their ability to determine agreement, the property that needs to be stipulated separately for every specific inherent case feature.

In this article, I alternatively propose that agreement with DPs in inherent cases is best accounted for, at least in some languages, by the hypothesis that an argument in an inherent case acquires the ability to determine ϕ -features on a functional head by way of being assigned a second, structural, case. By allowing multiple case assignment, the present proposal accounts for why some arguments in inherent cases are able to determine agreement, whereas some others are not, and brings the issue of agreement with DPs back to the *structural vs. inherent* distinction. Empirical data discussed in this article comes from Chirag,

a language of the Dargwa branch of the Nakh-Daghestanian family, spoken in the Caucasus (Daghestan, Russian Federation) by about two thousand speakers.¹ Like other Nakh-Daghestanian languages, Chirag Dargwa is morphologically ergative and has the basic head-final word order in both DPs and clauses, though the word order at the clause level is very free.

Starting with two baseline observations, first, person agreement in Chirag is hierarchical: that is, in a transitive sentence it can be controlled not only by the ergative subject but also by the absolutive direct object, when the latter outranks the former on a person hierarchy, as shown in (2).²

- (2) a. *di-cɛ pat'imat gap-r-arq'-ib-da.*
 I-ERG Patimat(ABS) praise-F.SG-LV:PF-AOR-1
 'I praised Patimat (female proper name).'
- b. *pat'imat-le du gap-w-arq'-ib-da.*
 Patimat-ERG I(ABS) praise-M.SG-LV:PF-AOR-1
 'Patimat praised me.'

Second, apart from ergative and absolutive DPs, shown in (2), dative and genitive arguments are also able to trigger person agreement, as seen from agreement with non-canonically marked subjects in (3).

- (3) a. *dami pat'imat r-ǧh-un-da.*
 I(DAT) Patimat(ABS) F.SG-see:PF-AOR-1
 'I saw Patimat.'
- b. *di-la qurt'-ib-da.*
 I-GEN startle-LV:AOR-1
 'I startled.'

Agreement with non-absolutive arguments, however, is restricted. On the one hand, only subjects, but not internal arguments, in ergative, dative, and genitive case can trigger agreement. On the other hand, non-absolutive subjects can also fail to control person agreement, in two environments. First, with some verbs, dative subjects never agree, as seen from (4).

- (4) *dami pat'imat kalat'-r-uχ-ub.*
 I(DAT) Patimat(ABS) forget-F.SG-LV:PF-AOR.3
 'I forgot Patimat.'

Second, all ergative and dative subjects fail to control agreement when embedded into the periphrastic causative construction, even though the periphrastic causative constitutes a single domain for person agreement; see (5).

¹ The data in this article comes from my own fieldwork with three native speakers of Chirag. In addition, most of the (grammatical) examples reported here also have structural parallels in my corpus of spoken Chirag speech (ca. 400,000 tokens), thus independently confirming the existence of the pattern discussed here. I provide elicited rather than naturalistic examples solely for the purposes of structural unambiguity and better comparability between the examples.

² Until Section 7, I use the term "subject" to refer to the highest DP among the visible clausal arguments; see 2.2. In Section 7, I will propose that some of such DPs are true thematic/grammatical subjects, whereas some others are VP-internal non-subject arguments.

- (5) a. *pat'imat-le di-c:ɛ waca b-uc-i b-aq-ib(*-da).*
 Patimat-ERG I-ERG mouse(ABS) N.SG-catch:PF-INF N.SG-CAUS:PF-AOR-1
 'Patimat made me catch the mouse.'
- b. *pat'imat-le dami sika b-ǫh-i b-aq-ib(*-da).*
 Patimat-ERG I(DAT) bear(ABS) N.SG-see:PF-INF N.SG-CAUS:PF-AOR-1
 'Patimat showed me a bear.'

The subject of the lexical verb (“causee”) appears in the ergative and dative case in (5a) and (5b), respectively. Yet, it cannot control person agreement on the finite causative verb, even when it is the only non-third-person DP in the sentence.

While the absence of agreement with an internal argument in an oblique morphological case may be expected and could be easily explained away by appealing to them having inherent case or being PPs, the selective sensitivity of the person probe to non-absolute subjects is puzzling, given the overall profile of agreement in Chirag as hierarchical and as able to be controlled by subjects in non-absolute cases. The question this article has a goal of answering is formulated in (6), with the descriptive generalization in (7) and my theoretical proposal in (8).

(6) Selective sensitivity of person agreement: the puzzle

Why do only some arguments but not others in ergative, dative, and genitive case trigger person agreement?

(7) Descriptive generalization

The ability of a non-absolute argument to trigger person agreement is determined by its structural position: a non-absolute argument can compete for person agreement only if it is the highest argument in the c-command domain of T.

(8) Theoretical proposal

A non-absolute DP bearing inherent case can agree by virtue of being assigned structural nominative case by T.

The structure of the paper is as follows. Section 2 provides a short introduction to the morphological case system of Chirag, discusses case marking of subject arguments in simple clauses, and introduces argument case marking in the periphrastic causative construction. In Section 3, I show that subjects are normally visible to the person probe, regardless of their morphological case, and discuss the hierarchical nature of person agreement in Chirag. I also identify the structural locus of person agreement as T and show how the derivation of hierarchical agreement can be technically implemented. Section 4 discusses the absence of person agreement in the examples shown above and demonstrates that they remain unaccounted for, formulating the puzzle dealt with in this article: selective sensitivity of the person probe to arguments in non-absolute cases. Section 5 lays out the proposal. I propose that all non-absolute arguments, including subjects, first only bear inherent case assigned within *vP* and are invisible to Agree probes on functional heads. The ability to trigger agreement can be acquired by a non-absolute DP as a result of it entering a relationship with T, more specifically, being assigned structural nominative case by T, which makes that DP accessible to Agree. Section 6 motivates the inherent case part of the analysis. I argue that non-absolute cases display two major properties of inherent case: they are assigned within *vP*, as seen from the periphrastic causative construction (6.1), and are closely associated with specific thematic roles or individual lexical verbs (6.2). Section 6.3 describes the assumed case assignment procedure in Chirag. In Section 6.4, I argue that ergative case cannot be analyzed as dependent. Section 7 looks deeper into non-agreeing dative subjects, which are not subsumed under the most straightforward reading of the generalization in (7), and argues

them to be VP-internal arguments, c-commanded by an argumental expletive in the subject position, in contrast to agreeing subjects in ergative, dative, and genitive cases, which occupy the specifier of ν P. I conclude that person agreement with non-absolute arguments is contingent on the DP being closest to T in its c-command domain. Section 8 spells out how key examples discussed throughout this article are derived. Section 9 concludes.

2 Argument case marking in Chirag

2.1 Morphological case

Nominal inflection in Chirag is a quite typical example of the Nakh-Daghestanian system (see Daniel and Ganenkov 2008 for an overview), showing the distinction between the morphologically unmarked absolutive case and all other (*oblique*) cases expressed by means of dedicated suffixes attached to the *oblique stem*. The latter is formed from the absolutive by means of an *oblique stem marker*. In Chirag, most singular nouns use the oblique stem marker *-li*, though some singular nouns employ the markers *-u* or *-a*. All plural nouns use the oblique stem suffix *-a*. Case suffixes attached to the oblique stem display some allomorphy depending on the choice of the oblique stem marker.

The nominal paradigm includes the unmarked absolutive and three marked grammatical cases: ergative (zero or *-d*), genitive in *-la*, and comitative in *-cille*. The spatial part of the nominal paradigm includes a number of forms employed to denote various spatial configurations. The locative suffix, also attached to the oblique stem, indicates the domain with respect to which a spatial configuration is defined. The inventory of locative suffixes, traditionally glossed using Latin prepositions, includes six markers: SUPER ‘on a surface’ (suffix *-i/-j*), IN ‘in a hollow space’ (suffix *-a^sne*), INTER ‘in a substance, among’ (suffix *-c:e*), AD ‘close to’ (suffix *-šu*), POST ‘in the proximity of’ (suffix *-hra*), ANTE ‘in front of’ (suffix *-sa*). Unlike grammatical cases, locative forms can further attach the relative suffix *-rka* to indicate movement away from the landmark. Table 1 shows the core inventory of cases in Chirag.³

Table 1. The inventory and morphological structure of nominal cases in Chirag.

	OBLIQUE STEM	CASE1	CASE2	GLOSS
$\sqrt{\text{ROOT}}$				ABS
	<i>-li</i>	<i>-O⁴</i>		ERG
	<i>-u</i>	<i>-d</i>		
	<i>-a</i>	<i>-la</i>		GEN
		<i>-cille</i>		COMIT
		<i>-i/-j</i>		SUPER
		<i>-i</i>	<i>-rka</i>	SUPER-ELAT
		<i>-a^sne</i>		IN
		<i>-a^sni</i>	<i>-rka</i>	IN-ELAT
		<i>-c:e</i>		INTER
		<i>-c:i</i>	<i>-rka</i>	INTER-ELAT

³ Chirag also has a set of translative forms further built on the basis of elatives. Those play no role in the subsequent discussion and are not included in the paradigm for the sake of simplicity.

⁴ The zero allomorph of the ergative only appears with the oblique stem marker *-li*, which means that the bare oblique stem is used to convey the ergative case. Since [i] in the word-final position undergoes obligatory widening to [e], bare oblique stems in *-li* in the function of the ergative actually appear as *-le* in many examples below (the same morphophonological process can also be observed in other case suffixes, cf. the allomorphs of IN and INTER in their bare locative form and in the relative forms).

	-š:u		AD
	-š:u	-rka	AD-ELAT
	-hra		POST
	-hra	-rka	POST-ELAT
	-sa		ANTE
	-sa	-rka	ANTE-ELAT

An important and relevant point in the context of the following discussion property of the Chirag nominal paradigm is the absence of the morphological dative case. Instead, the locative SUPER case is used in typical dative functions, such as the marking of the recipient and various examples of indirect objects. The sentences in (9) illustrate the SUPER case in both its locative and non-locative functions.

(9) Functions of the locative case SUPER

- a. *du čimi-l-i u-da.*
I(ABS) bridge-OBL-SUPER (M.SG)be-1
'I am on the bridge.'
- b. *ʔaš-n-a-d it xadi-l-i nis:ija a^f-b-ič-ib.*
shepherd-PL-OBL-ERG that woman-OBL-SUPER cheese(ABS) NEG-N.SG-give:PF-AOR.3
'The shepherds didn't give any cheese to that woman.'
- c. *mqlʔun-ne pat'imat-l-i q'ac'-ib.*
snake-ERG Patimat-OBL-SUPER bite:PF-LV:AOR.3
'A snake bit Patimat (a female proper name).'
- d. *rusi-l-i u^ll-čas-m-erg-u!*
girl-OBL-SUPER eye-PV-NEG-(M.SG)stay:IPF-PROH
'Don't look at the girl!'

Since we will only be concerned with non-locative functions of this nominal form in the discussion to follow, it will be referred to and glossed as *dative case*, for the ease of exposition.

2.2 Subject case marking

As is already clear from the discussion above, Chirag Dargwa is a morphologically ergative language, where the subject of a transitive verb is expressed by the special (morphologically marked) case, whereas the subject of an intransitive verb and the direct object of a transitive verb are expressed by the unmarked absolutive case. The examples in (10) illustrate the morphological ergativity of Chirag.

(10) Morphological ergativity

- a. *ʔale ša w-ač'-ib.*
Ali(ABS) home.LOC M.SG-come:PF-AOR.3
'Ali (a male proper name) came home.'
- b. *ʔali-le qar-be d-iʔ-un.*
Ali-ERG apple-PL(ABS) N.PL-steal:PF-AOR.3
'Ali stole apples.'
- c. *pat'imat-le ʔale ibq-ib.*
Patimat-ERG Ali(ABS) (M.SG)deceive:PF-AOR.3
'Patimat deceived Ali.'

The examples demonstrate the same DP *ʔale* ‘Ali’ in three diagnostic positions: the subject of the intransitive verb *Bač’i* ‘come’ in (10a), the subject of the transitive verb *Biʔwi* ‘steal’ in (10b), and the direct object of the transitive verb *Bibqi* ‘deceive’ in (10c).⁵ As can be seen, both (10a) and (10c) have the DP in the unmarked absolutive case, whereas (10b) requires the DP to bear the ergative case marking. Likewise, as seen from (10), gender–number agreement registered in the prefixal agreement slot also works on the ergative–absolutive basis: only absolutive arguments can trigger gender agreement on the verb.

Apart from the ergative and absolutive subjects, Chirag can also have subjects in the dative and genitive cases. For the purposes of the present article, structural prominence is diagnosed by the ability of an argument to bind the complex reflexive in the same clause. Complex reflexives in Chirag are local and consist of two instances of the long-distance reflexive *caBe*, each bearing its own case: one instance of *caBe* is in the case of the subject (antecedent), the other is marked by the case appropriate for the bound (reflexivized) position.⁶ In reflexive constructions involving no absolutive argument, the case marking of the two parts also reflects structural prominence: the first part is always in the case of the c-commanding antecedent, whereas the second part is in the case of the c-commanded argument. In complex reflexives involving an absolutive position, the absolutive-marked part always comes second, whereas the first part bears the case of the non-absolutive argument regardless of c-command.

Intransitive verbs have the subject in the absolutive case which binds the complex reflexive in the same clause. By contrast, a non-absolutive internal argument of an intransitive verb cannot be the antecedent of the complex reflexive, as in example (11).

(11) Complex reflexive in intransitive clauses

- a. *pat’imat ʔali-l-i uʔl-r-irg-le.*
 Patimat(ABS) Ali-OBL-DAT eye-F.SG-stay:IPF-DUR.3
 ‘Patimat is looking at Ali.’
- b. { *pat’imat / *pat’imat-l-i* } *cin-i caʁe uʔl-r-irg-le.*
 Patimat(ABS) Patimat-OBL-DAT REFL-DAT <F.SG>REFL(ABS) eye-F.SG-stay:IPF-DUR.3
 ‘Patimat is looking at herself.’

Example (11a) shows the baseline sentence with the intransitive verb *uʔl-Birgi* ‘look’ subcategorizing for the indirect object in the dative case. The sentence in (11b) demonstrates the separate case marking of the two components of the complex reflexive and ascertains that only the absolutive argument can function as the full antecedent DP.

In transitive clauses, only the ergative DP can be the antecedent of the complex reflexive, whereas other arguments, including the absolutive DP, cannot, as shown in (12).

(12) Complex reflexive binding in transitive clauses

- a. *pat’imat-le ʔale gap-w-arq’-ib.*
 Patimat-ERG Ali(ABS) praise-M.SG-LV:PF-AOR.3

⁵ Capital *B* stands for the gender–number agreement marker. The presence of the agreement slot is lexical information: some verbs are specified as agreeing and show agreement in gender and number in all of their forms, finite and non-finite, while other verbs never have gender–number agreement. The agreement slot can host the following morphological markers: M.SG *w-/j-/0-*, F.SG *r-*, N.SG *b-*, M/F.PL *b-*, and N.PL *d-* (mass nouns often show neuter plural agreement even in their morphological singular forms).

⁶ Chirag follows the common Nakh-Daghestanian pattern of reflexive marking: the simple reflexive can be bound either within its clause or from a matrix clause, whereas the complex reflexive, consisting of two exemplars of the simple reflexive, requires a c-commanding clausemate antecedent; see Ganenkov and Bogomolova (2020) for an overview of anaphora in languages of the Caucasus.

- ‘Patimat praised Ali.’
- b. { *pat’imat-le* / **pat’imat* } *cin-e caŋe gap-r-arq’-ib.*
 Patimat-ERG Patimat(ABS) REFL-ERG <F.SG>REFL(ABS) praise-F.SG-LV:PF-AOR.3
 ‘Patimat praised herself.’

Example (12a) demonstrates that the verb *gapBarq’i* ‘praise’ is a transitive verb with the subject in the ergative case and the direct object in the absolutive case. Sentence (12b) shows the complex reflexive, bearing the ergative marking on the first component and the absolutive case on the second component, according to the transitive pattern of the verb. The antecedent of the complex reflexive can only appear in the ergative case, never in the absolutive. In a similar way, indirect objects of transitive verbs cannot antecede the complex reflexive either, as in (13).

(13) Indirect objects in the dative cannot bind the complex reflexive

- a. *pat’imat-le ?ali-l-i mašna as-ib.*
 Patimat-ERG Ali-OBL-DAT car(ABS) buy:PF-AOR.3
 ‘Patimat bought Ali a car.’
- b. *?ali-le cin-e cin-i mašna as-ib.*
 Ali-ERG REFL-ERG REFL-DAT car(ABS) buy:PF-AOR.3
 ‘Ali bought himself a car.’
- c. **?ali-l-i cin-i cin-e mašna as-ib.*
 Ali-OBL-DAT REFL-DAT REFL-ERG car(ABS) buy:PF-AOR.3
 Intended: ‘Ali bought himself a car.’

As shown in (13a), the benefactor surfaces as the DP in the dative case. In sentences expressing the reflexive relationship between the ergative subject and the dative benefactor, as in (13b), the complex reflexive has the ergative case of the subject and the dative case of the benefactor on its two components, whereas the antecedent of the complex reflexive can only be in the ergative case.

As mentioned above, apart from two major verbal classes—transitive and intransitive—a small set of verbs have their subject in the dative case; (14a) gives the list of dative subject verbs; (14b) and (14c) show argument case marking in sentences with the dative subject verbs *Baħi* ‘see’ and *Ƶalat’Buħi* ‘forget’.

(14) Dative subject verbs

- a. *Baħi* ‘see’, *č’aBaq’i* ‘hear’, *haBaħi* ‘find out’, *čarB’i* ‘understand’, *Bik-* ‘love, want (stative)’, *Bik:agi* ‘fall in love, begin to want’, *siBic’i* ‘get bored, be enough for’, *Buħu-* ‘know (stative)’, *majar ej* ‘dream’, *majar Bač’i* ‘dream’, *Ƶalat’ Buħi* ‘forget’, *urč’ili Bač’i* ‘recall, remember’, *Baši* ‘find’, *saBBarħi* ‘meet, come across’.
- b. *?ali-l-i si:k-ne d-qaħ-un.*
 Ali-OBL-DAT bear-PL(ABS) N.PL-see:PF-AOR.3
 ‘Ali saw bears.’
- c. *?ali-l-i pat’imat Ƶalat’-r-uħ-ub.*
 Ali-OBL-DAT Patimat(ABS) forget-F.SG-LV:PF-AOR.3
 ‘Ali forgot Patimat.’

With respect to complex reflexive binding, the dative argument of subject experiencer verbs demonstrates behavior identical to that of the ergative subject: it can be the antecedent of the complex reflexive, while the clausemate absolutive argument cannot, as in (15).

(15) Complex reflexive binding with dative subject verbs

- a. { *pat'imat-l-i* / **pat'imat* } *cin-i* *caræ* *r-gh-un*.
 Patimat-OBL-DAT Patimat(ABS) REFL-DAT <F.SG>REFL(ABS) F.SG-see:PF-AOR.3
 'Patimat saw herself (on the picture).'
- b. { *pat'imat-l-i* / **pat'imat* } *cin-i* *caræ* *balat'-r-uχ-ub*.
 Patimat-OBL-DAT Patimat(ABS) REFL-DAT <F.SG>REFL(ABS) forget-F.SG-LV:PF-AOR.3
 'Patimat forgot herself (≈she cares more about others than herself).'

According to the general rule, the complex reflexive in (15a) and (15b) has the dative case of the subject on its first component and the absolutive case of the direct object on its second component. The antecedent DP in both examples can only be in the dative case. It is this ability to serve as the antecedent of the complex reflexive that distinguishes the dative arguments with verbs like 'see' and 'forget' from indirect objects in the dative case, which cannot function as the antecedent DP in complex reflexive constructions, as shown above in (11b) and (13c).

Chirag also has the verb *qurt'i* 'startle' which has the subject in the genitive case. The verb cannot have any internal arguments, so that we cannot test complex reflexive binding. However, the subject status of the genitive argument is seen from its behavior in imperative clauses and obligatory control (discussed in Section 7). Example (16) shows a sentence with a third person subject.

(16) The genitive subject verb *qurt'i* 'startle'

- ʔali-la qurt'-ib*.
 Ali-GEN startle-LV:AOR.3
 'Ali startled.'

To sum up, subject case marking allows us to distinguish four verbal classes: (i) intransitive verbs with absolutive subjects, (ii) transitive verbs with ergative subjects, (iii) dative subject verbs, (iv) the genitive subject verb *qurt'i* 'startle'. In the next section, I discuss argument case marking in the causative.

2.3 Case marking in the causative

The causative construction is periphrastic in Chirag, consisting of the lexical verb in the infinitive and the causative verb *Baqi*. The subject of the causative verb (the causer) is always in the ergative case. The arguments of the embedded causativized verb are expressed exactly the way they are in finite sentences, as described in the previous section. The sole argument of the intransitive causativized verb is in the absolutive case, as in (17); the thematic subject of the transitive causativized verb bears the ergative case, as shown in (18); the thematic subject of the causativized dative subject verb stays in the dative, as example (19) demonstrates. Finally, the genitive subject of *qurt'i* 'startle' also fits into the general pattern and preserves its usual case marking, as shown in (20). The case marking of non-subject arguments is not affected in the causative construction either.

(17) Causative on the intransitive base

- pat'imat-le ʔale ša w-ač'-i j-aq-ib*.
 Patimat-ERG Ali(ABS) home.LOC M.SG-come:PF-INF M.SG-CAUS:PF-AOR.3
 'Patimat made Ali come home.'

(18) Causative on the transitive base

pat'imat-le ?ali-le qqr-be d-iʔ^w-i d-aq-ib.
 Patimat-ERG Ali-ERG apple(ABS) N.PL-steal:PF-INF N.PL-CAUS:PF-AOR.3
 'Patimat made Ali steal the apples.'

(19) Causative on the dative subject verb base

a. *pat'imat-le ?ali-l-i sɪk-ne d-qħ-i d-aq-ib.*
 Patimat-ERG Ali-OBL-DAT bear-PL(ABS) N.PL-see:PF-INF N.PL-CAUS:PF-AOR.3
 'Patimat showed the bears to Ali (= caused Ali to see the bears).'

b. *pat'imat-le ?ali-l-i ta^ʃ rus:e ʁalat'-r-uχ-i r-aq-ib.*
 Patimat-ERG Ali-OBL-DAT that girl(ABS) forget-F.SG-LV:PF-INF F.SG-CAUS:PF-AOR.3
 'Patimat caused Ali to forget that girl.'

(20) Causative of *qurt'i* 'startle'

madina-le mahmad-la qurt'-i b-aq-ib.
 Madina-ERG Mahamad-GEN startle-LV:INF N.SG-CAUS:PF-AOR.3
 'Madina caused Mahamad to startle.'

As seen from these examples, the periphrastic causative in Chirag is not the most typical example of the causative construction. Cross-linguistically, causative constructions may instantiate a monoclausal structure with the thematic subject of transitive verb (*causee*) expressed as an indirect object, for example, in dative case. Alternatively, the causative may be expressed as a biclausal obligatory control construction with the controlled null pronoun in the position of the lexical subject and, again, an indirect causee object in the matrix clause. By contrast, Chirag does not make any kind of "demotion" of the thematic subject of the causativized verb to an indirect position: all case marking stays intact in the causative construction. Now that we have reviewed patterns of subject case marking and established that case-marked (non-absolutive) subjects are structurally more prominent than other clausal arguments,⁷ we turn to patterns of person agreement in Chirag.

3 Person agreement

3.1 Subjects can control person agreement

Like other Dargwa languages, Chirag has hierarchical person agreement; that is, person agreement can potentially be controlled by either the subject or the direct object, depending on their person values (see Sumbatova 2011 for an overview of systems of person agreement in Dargwa languages). In particular, the absolutive subject of an intransitive verb can control person agreement, as shown in (21).

(21) Person agreement with intransitive subjects

a. *du ?ali-l-i u^ʃl-r-irg-an-da.*
 I(ABS) Ali-OBL-DAT eye-F.SG-stay:IPF-DUR-1
 'I am looking at Ali.'

⁷ Note that complex reflexive binding only establishes structural prominence (c-command) rather than the grammatical subjecthood of an argument, as seen, for example, from sentences where the complex reflexive is bound by the embedded subject in the ergative or dative case in the causative construction, shown in (i).

(i) *pat'imat-le ?ali-l-i cin-i caj j-qħ-i j-aq-ib.*
 Patimat-ERG Ali-OBL-DAT REFL-DAT REFL.M.SG(ABS) M.SG-see:PF-INF M.SG-CAUS:PF-AOR.3
 'Patimat showed Ali_i to himself_i (in the mirror).'

- b. *u^f ʔali-l-i u^fl-r-irg-an-de.*
 you.SG(ABS) Ali-OBL-DAT eye-F.SG-stay:IPF-DUR-2SG
 ‘You are looking at Ali.’

Unlike other Dargwa languages, though, Chirag has person agreement showing the preference for the subject in transitive constructions. That is, in a transitive sentence with a first/second person subject, that subject always determines person agreement on the verb regardless of the person value of the direct object, as in (22).

(22) Person agreement with the subject

- a. *di-c:e pat'imat gap-r-arq'-ib-da.*
 I-ERG Patimat(ABS) praise-F.SG-LV:PF-AOR-1
 ‘I praised Patimat.’
- b. *di-c:e u^f gap-w-arq'-ib-da.*
 I-ERG you.SG(ABS) praise-M.SG-LV:PF-AOR-1
 ‘I praised you.’
- c. *a^f-c:e pat'imat gap-r-arq'-ib-de.*
 you.SG-ERG Patimat(ABS) praise-F.SG-LV:PF-AOR-2SG
 ‘You praised Patimat.’
- d. *a^f-c:e du gap-w-arq'-ib-de.*
 you.SG-ERG I(ABS) praise-M.SG-LV:PF-AOR-2SG
 ‘You praised me.’

In a sentence with a third person subject and a first/second person direct object, person agreement is determined by the direct object, as in (23).

(23) Person agreement with the transitive direct object

- a. *pat'imat-le du gap-w-arq'-ib-da.*
 Patimat-ERG I(ABS) praise-M.SG-LV:PF-AOR-1
 ‘Patimat praised me.’
- b. *pat'imat-le u^f gap-w-arq'-ib-de.*
 Patimat-ERG you.SG(ABS) praise-M.SG-LV:PF-AOR-2SG
 ‘Patimat praised you.’

Third person agreement only appears in sentences where both the subject and the direct object are third person, as shown in (24).

(24) Third person agreement

- pat'imat-le ʔale gap-w-arq'-ib.*
 Patimat-ERG Ali(ABS) praise-M.SG-LV:PF-AOR.3
 ‘Patimat praised Ali.’

The examples in (25) demonstrate that dative subjects can also control person agreement and, more generally, show exactly the same behavior as the ergative subject of a transitive verb: a first/second person dative subject controls person agreement regardless of the features of the direct object; a third person subject is skipped to give way to agreement with a first/second person direct object.

(25) Person agreement with the dative subject

- a. *dami pat'imat r-qh-un-da.*
 I(DAT) Patimat(ABS) F.SG-see:PF-AOR-1
 'I saw Patimat.'
- b. *dami u^s j-qh-un-da.*
 I(DAT) you.SG(ABS) M.SG-see:PF-AOR-1
 'I saw you.'
- c. *pat'imat-l-i du j-qh-un-da.*
 Patimat-OBL-DAT I(ABS) M.SG-see:PF-AOR-1
 'Patimat saw me.'

The genitive argument of the verb *qurt'i* 'startle' also controls person agreement, as the examples in (26) demonstrate.

(26) Person agreement with the genitive subject

- a. *di-la qurt'-ib-da.*
 I-GEN startle-LV:AOR-1
 'I startled.'
- b. *a^s-la qurt'-ib-de.*
 you.SG-GEN startle-LV:AOR-2SG
 'You startled.'

Given this pattern, all cases employed to express the subject argument—the absolutive, the ergative, the dative, and the genitive—can be diagnosed as visible to the person probe, for all of them can determine the person value appearing on the finite verb. The next section argues that the person probe is located on T in Chirag.

3.2 Person probe resides on T

Before we turn to the discussion of the properties of non-absolutive subjects, a short note is in order about the structural locus of person agreement in Chirag. Like in other Dargwa languages (Sumbatova and Lander 2014 on Tanti Dargwa), tense and person markers occupy the same morphological position in the verb. In forms like the Durative and Resultative, which have parallel present and past tense forms, the overt expression of tense is in complementary distribution with overt person agreement. In present tense forms, where tense does not have special morphological marking, the Durative shows person agreement. By contrast, in past tense forms with the overt past tense marker *-de*, no person agreement is observed. Table 2 shows the paradigm of the Durative in the present and past.

Table 2. Durative forms of the verb *Barq'i* 'do, make'.

	Present	Past
1SG	b-irq'-an-da N.SG-do:IPF-DUR-1SG	b-irq'-an-de N.SG-do:IPF-DUR-PST
1PL.EXCL	b-irq'-an-da N.SG-do:IPF-DUR-1PL.EXCL	
1PL.INCL	b-irq'-an-ħa N.SG-do:IPF-DUR-1PL.INCL	
2SG	b-irq'-an-de N.SG-do:IPF-DUR-2SG	
2PL	b-irq'-an-da N.SG-do:IPF-DUR-2PL	

This morphological fact can be taken as evidence that tense and person marking are morphological reflexes of the features of the same clausal head T. Moreover, person agreement is observed mainly in finite clauses (with the exception of conditional forms and subjunctives), which suggests that person agreement is a property of finite T.

3.3 Deriving person agreement

Person agreement in Chirag is thus hierarchical, residing on T. In a transitive sentence, the person value of the highest argument in the c-command domain of T—the subject—is accessed first, and only after that can the person value of the next argument further down—the direct object—be seen: in the presence of a third person subject in the ergative or dative case, person agreement is with the first/second person direct object, which means that the probe searching for the controller can look past third person arguments further down the c-command domain of T.

This sensitivity of person agreement to the person hierarchy can be implemented by relativizing the agreement probe on T to specific person values. For the sake of concreteness, I assume the probe relativization along the lines proposed by Béjar and Rezac (2009). Person is decomposed into three nested layers—[person], [participant], and [speaker]—so that the three person values have increasing internal complexity from third person to second person to first person, depending on how much of this layered structure they have, as shown in (27).

(27) Person decomposition

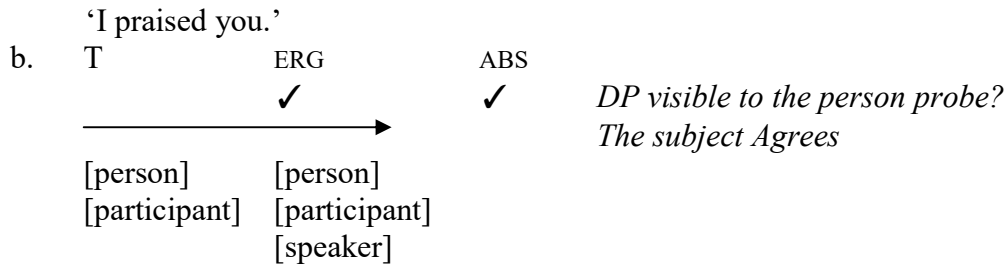
- a. Third person [person]
- b. Second person [[person] participant]
- c. First person [[person] participant] speaker]

Using these decomposed representations of person values, hierarchical agreement can be implemented by restricting the sensitivity of the agreement probe to arguments having [participant] in their representation. In Béjar and Rezac's (2009) system, the agreement probe relativized to [[person] participant] checks off only the [person] layer when encountering a third person argument and continues the search of a goal that would be able to discharge its [participant] feature, that is, a first or second person argument. The derivation of person agreement in Chirag is shown in (28) and (29).⁸

(28) Transitive sentence with the first/second person subject

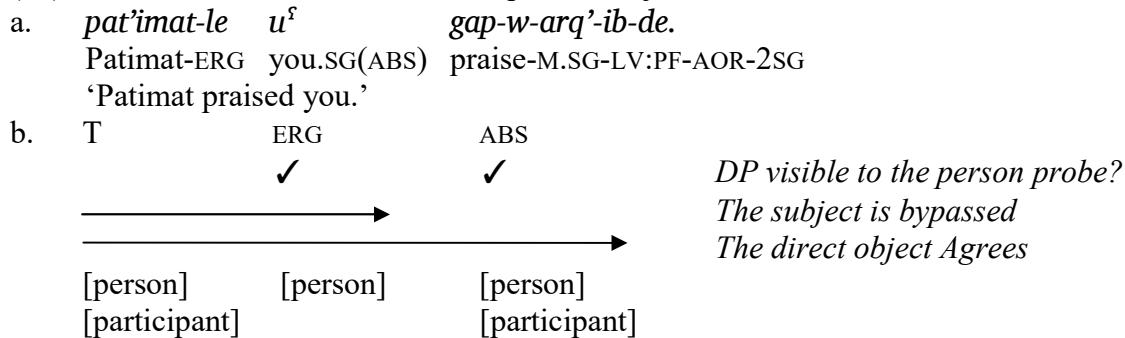
- a. *di-c:ε u^f gap-w-arq'-ib-da.*
I-ERG you.SG(ABS) praise-M.SG-LV:PF-AOR-1

⁸ Chirag, with its preference for subject agreement, presents a pattern opposite to that discussed by Béjar and Rezac (2009), where agreement is preferably with the direct object, while subject agreement only appears when a third person direct object fails to value the ϕ -features of the probe. The empirical profile of person agreement in Chirag thus makes unnecessary (and empirically inadequate) certain specific assumptions made by Béjar and Rezac, such as the structural location of the person probe between the internal argument and external argument and cyclic expansion, that is, the variable direction of Agree to first look downwards to find the internal argument and then upwards to Agree with the external argument. The model of person agreement assumed here is very close to what Béjar and Rezac call “standard locality pattern,” exemplified by number agreement in contrast to person agreement in Georgian (see Béjar 2003: 117–127). However, gender–number agreement in Chirag is case-discriminating, only detecting the features of the clausemate absolutive argument, that is, it shows the features of the absolutive direct object in transitive clauses and the features of the absolutive subject in intransitive clauses; see also Section 6.3.



(28a), repeating (22b), shows a transitive sentence with the first/second person subject. Under these conditions, the verb agrees with the subject irrespective of the features of the direct object. The schematic representation in (28b) shows how this agreement pattern arises. The person probe residing on T starts the search for a DP to check off its unvalued features [[person] participant]. The closest DP in the c-command domain of T is the subject bearing the ergative case. The subject is first person represented as [[[person] participant] speaker] and thus is able to check off all features of the probe, resulting in the morphological agreement between the subject and T. (29a), repeating (23b) above, shows the derivation of object agreement in transitive sentences.

(29) Transitive sentence with the third person subject



Here, the subject is a third person argument represented as [person]. When the ϕ -probe [[person] participant] finds the closest DP—the subject in the ergative case—in its c-command domain, the [participant] feature on the probe cannot be checked off, and the probe continues its search for an argument bearing [participant]. The next visible argument down the c-command domain is the absolutive direct object. In (29), the second person direct object has [[person] participant] and therefore discharges the [participant] feature, thus resulting in the morphological agreement between the direct object and T.

To summarize, person agreement in Chirag involves four components: (i) absolutive arguments are visible to the person probe regardless of their grammatical function/structural position, (ii) subjects in the ergative, dative, and genitive cases are visible to the person probe, (iii) the person probe resides on T, and (iv) the person probe is relativized to [[person] participant]. This constellation of properties yields exactly the pattern of person agreement we observe in Chirag: person agreement is with the structurally highest visible DP specified as no less than [[person] participant]. With this background, we are now ready to look at a puzzling agreement pattern in Chirag.

4 Puzzle

We have seen so far that the ergative, dative, and genitive arguments are visible to the person probe, which is also sensitive to the person hierarchy and therefore can skip a third person subject to find the next argument further down. Note also that Chirag has a number of verbs that subcategorize for an indirect object in the dative or genitive case. The indirect object

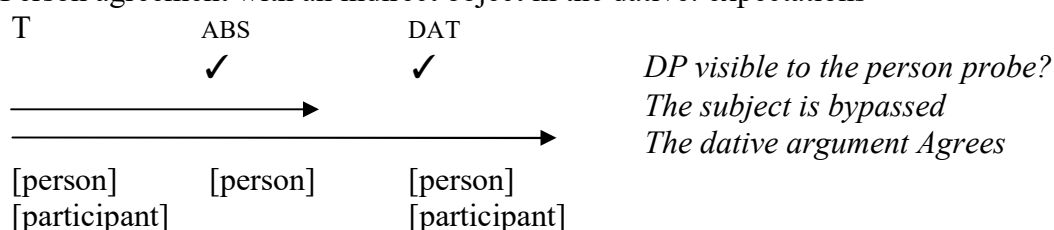
function of the dative case is illustrated back in (11a) and (13a). Example (30) shows an indirect object in the genitive case used with the verb *dič'i* ‘care’.

(30) Indirect object in the genitive case

ʔali-le pat'imat-la d-ik'-l-akru.
 Ali-ERG Patimat-GEN N.PL-care:IPF-DUR-NEG.3
 ‘Ali does not take care of Patimat.’

On the most straightforward interpretation of the relationship between case and agreement, the existence of non-subject arguments in the dative and genitive cases predicts that these arguments should also be able to control person agreement in the presence of a third person subject, in the same way that the absolutive direct object controls person agreement in sentences with a third person subject. Consider, for instance, the derivation of person agreement expected in an intransitive sentence that features the third person absolutive subject and the second person dative argument.

(31) Person agreement with an indirect object in the dative: expectations



According to the account developed above, the person probe on T must first see the absolutive subject. However, since the latter is only specified as [person], the person probe continues searching its c-command domain to find another visible DP. The next stop is the internal argument in the dative case, which is expected to be visible to the person probe and is specified as [[person] participant]. The dative DP must then be able to discharge the [participant] feature on the probe and thus trigger person agreement on the verb, as shown in (31). In a similar way, the internal dative argument in a transitive clause is expected to be able to control person agreement in configurations with the third person subject and third person direct object.

As the sentences in (32) show, this prediction is not borne out: in fact, dative and genitive arguments in a non-subject position can never trigger person agreement, regardless of the person of the subject. The sentences below demonstrate the configuration where non-subject agreement would be expected due to the third person value of the subject (and the direct object). Unlike absolutive arguments, which can trigger person agreement irrespective of their syntactic function, ergative, dative, and genitive DPs cannot control person agreement when in an indirect object position.

(32) No person agreement with indirect objects

- a. *pat'imat dami { u^l-r-irg-le / *u^l-r-irg-an-da }.*
 Patimat(ABS) I(DAT) eye-F.SG-stay:IPF-DUR.3 eye-F.SG-stay:IPF-DUR-1
 ‘Patimat is looking at me.’
- b. *pat'imat-le dami qar { b-ič:-ib / *b-ič:-ib-da }.*
 Patimat-ERG I(DAT) apple(ABS) N.SG-give:PF-AOR.3 N.SG-give:PF-AOR-1
 ‘Patimat gave me an apple.’
- c. *ʔali-le di-la { d-ik'-l-akru / *d-ik'-l-ačru-da }.*
 Ali-ERG I-GEN N.PL-care:IPF-DUR-NEG.3 N.PL-care:IPF-DUR-NEG-1

‘Ali does not take care of me.’

In (32a), the intransitive verb *u^lBirgi* ‘look’ can never agree with the first person argument in the dative case, even if the absolutive argument is a third person DP. Likewise, in (32b), the transitive verb *Bič*ñ** ‘give’ cannot agree with the first person recipient in the dative case, even when all other DPs in the clause are third person. Example (32c) shows that the indirect object in the genitive case with the verb *dič*’i** ‘care’ cannot trigger person agreement either.

A similar issue emerges upon a closer inspection of dative subjects. As it happens, dative subject verbs do not represent a homogeneous class with respect to person agreement. Most dative subject verbs, including *Ba*ñ** ‘see’, *č’aBa*q*’i* ‘hear’, *haBa*χ** ‘find out’, *čar*ʔ*’i* ‘understand’, *majar ej* ‘dream’, *Bik*’** ‘love, want (stative)’, and *Bik*’*agi* ‘fall in love, begin to want’, show hierarchical agreement with the preference for the subject, just like transitive verbs, as shown in (25) for the verb *Ba*ñ** ‘see’.

However, some verbs, such as *ʔalat’Bu*χ** ‘forget’, *urč’ili Bač’i* ‘recall, remember’, *Ba*ʔ** ‘find’, and *saBBa*ʔ*’i* ‘meet, come across’, behave like intransitive verbs in person agreement: only the absolutive argument can agree with the verb, while the dative DP is inert, as in (33).

(33) Person agreement of *ʔalat’Bu*χ** ‘forget’

- a. *dami pat’imat ʔalat’-r-u*χ*-ub.*
I(DAT) Patimat(ABS) forget-F.SG-LV:PF-AOR.3
‘I forgot Patimat.’
- b. *dami u^ʔ ʔalat’-u*χ*-ub-de.*
I(DAT) you.SG(ABS) forget-(M.SG)LV:PF-AOR-2SG
‘I forgot you.’
- c. *pat’imat-l-i du ʔalat’-u*χ*-ub-da.*
Patimat-OBL-DAT I(ABS) forget-(M.SG)LV:PF-AOR-1
‘Patimat forgot me.’

As can be seen, the dative argument fails to trigger agreement in sentences (33a) and (33b). As discussed in Section 2, the binding of the complex reflexive diagnoses the dative argument with all dative subject verbs as the highest in the clause. As shown in Section 3.1 above, person agreement with verbs like ‘see’ confirms that DPs in dative case are in principle visible to the person probe in Chirag. Examples (33a) and (33b) are then predicted to have agreement with the dative subject, contrary to fact. Instead, the absolutive argument is the only DP that can control person agreement, regardless of the person value of the dative argument, as in (33b) and (33c). Anticipating the discussion in Section 7, there is evidence that the dative argument with verbs like *ʔalat’Bu*χ** ‘forget’ occupies a different structural position than the dative argument with verbs like *Ba*ñ** ‘see’, which leads to the difference in their agreement behavior.

Finally, person agreement in periphrastic causative constructions adds one more piece to this picture. The agreement behavior of the ergative causer and the absolutive argument of the lexical verb obeys the general rule of agreement in transitive clauses: both can trigger person agreement, in this order of preference. The examples in (34) demonstrate that the ergative subject of the causative verb can control person agreement on the finite causative verb.

(34) Person agreement with the ergative causer

- a. *di-c:ε ʔale w-ačʻ-i j-aq-ib-da.*
I-ERG Ali(ABS) M.SG-come:PF-INF M.SG-CAUS:PF-AOR-1
'I made Ali come.'
- b. *di-c:ε ʔali-le waca b-uc-i b-aq-ib-da.*
I-ERG Ali-ERG mouse(ABS) N.SG-catch:PF-INF N.SG-CAUS:PF-AOR-1
'I made Ali catch the mouse.'
- c. *di-c:ε ʔali-l-i sika b-qh-i b-aq-ib-da.*
I-ERG Ali-OBL-DAT bear(ABS) N.SG-see:PF-INF N.SG-CAUS:PF-AOR-1
'I showed Ali a bear.'
- d. *di-c:ε ʔali-l-i taʻ ʒabar ʒalatʻ-b-uχ-i b-aq-ib-da.*
I-ERG Ali-OBL-DAT that story(ABS) forget-N.SG-LV:PF-INF N.SG-CAUS:PF-AOR-1
'I caused Ali to forget that story.'

In a similar way, the absolutive argument of the lexical verb also controls agreement when it is the highest first/second person DP in the causative construction, as shown in (35).

(35) Person agreement with the absolutive argument of the causativized verb

- a. *patʻimat-le du w-ačʻ-i j-aq-ib-da.*
Patimat-ERG I(ABS) M.SG-come:PF-INF M.SG-CAUS:PF-AOR-1
'Patimat made me come.'
- b. *patʻimat-le ʔali-le du r-uc-i r-aq-ib-da.*
Patimat-ERG Ali-ERG I(ABS) F.SG-catch:PF-INF F.SG-CAUS:PF-AOR-1
'Patimat made Ali catch me.'
- c. *patʻimat-le ʔali-l-i du r-qh-i r-aq-ib-da.*
Patimat-ERG Ali-OBL-DAT I(ABS) F.SG-see:PF-INF F.SG-CAUS:PF-AOR-1
'Patimat showed me to Ali (=caused Ali to see me).'
- d. *patʻimat-le ʔali-l-i du ʒalatʻ-r-uχ-i r-aq-ib-da.*
Patimat-ERG Ali-OBL-DAT I(ABS) forget-F.SG-LV:PF-INF F.SG-CAUS:PF-AOR-1
'Patimat caused Ali to forget me.'

Just like in regular transitive sentences, the choice of the person agreement controller is determined by the person values of the ergative causer and the absolutive argument of the causativized verb. In sentences with a first/second person ergative causer, person agreement is with the former, irrespective of the person values of other arguments, as shown in (36).

(36) Subject agreement in the causative

- a. *di-c:ε ʔali-le uʻ r-uc-i r-aq-ib-da.*
I-ERG Ali-ERG you.SG(ABS) F.SG-catch:PF-INF F.SG-CAUS:PF-AOR-1
'I made Ali catch you.'
- b. *aʻ-c:ε ʔali-le du r-uc-i r-aq-ib-de.*
you.SG-ERG Ali-ERG I(ABS) F.SG-catch:PF-INF F.SG-CAUS:PF-AOR-2SG
'You made Ali catch me.'
- c. *di-c:ε aʻ-c:ε waca b-uc-i b-aq-ib-da.*
I-ERG you.SG-ERG mouse(ABS) N.SG-catch:PF-INF N.SG-CAUS:PF-AOR-1
'I made you catch the mouse.'
- d. *aʻ-c:ε di-c:ε waca b-uc-i b-aq-ib-de.*
you.SG-ERG I-ERG mouse(ABS) N.SG-catch:PF-INF N.SG-CAUS:PF-AOR-2SG
'You made me catch the mouse.'

Third person agreement is observed in sentences where all arguments are of third person, as shown in Section 2 above.

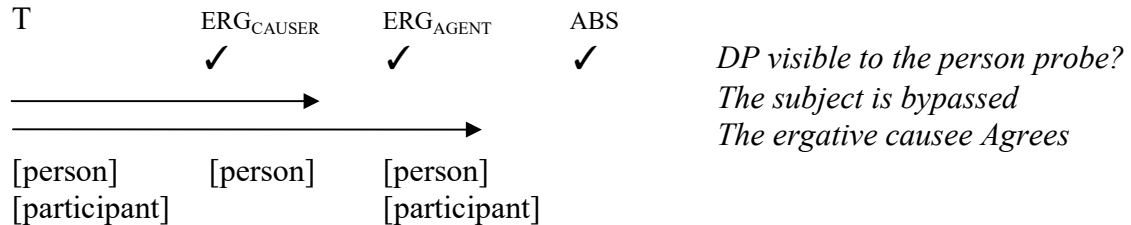
With regard to the subject of the lexical verb in the periphrastic causative, person agreement with the first/second person subject is expected to be absent in causatives based on verbs like *kalat'buχi* 'forget', since their dative argument can never control person agreement. This expectation is borne out, as seen from (37).

(37) No agreement with the dative argument of *kalat'buχi* 'forget'

pat'imat-le dami ta^f χabar kalat'-b-uχ-i b-aq-ib(-da).*
 Patimat-ERG I(DAT) that story(ABS) forget-N.SG-LV:PF-INF N.SG-CAUS:PF-AOR-1
 'Patimat caused me to forget that story.'

However, given what we know about person agreement and causative constructions in Chirag, agreement with the non-absolutive subject of the lexical verb would be expected in causatives based on transitive verbs and agreeing dative and genitive subject verbs. First, we know that the ergative subject of a transitive verb, the dative subject of verbs like *Bq̄hi* 'see', and the genitive subject of *qurt'i* 'startle' trigger obligatory person agreement in finite environments. Second, as shown above, person agreement of the causative verb can be with the absolutive argument of the causativized verb, which means that the infinitival layer of the causative construction is in principle accessible to the person probe in the causative layer (i.e., the periphrastic causative is a single agreement domain in terms of Bobaljik and Wurmbrand 2005). The subject of the causativized verb, structurally located between the ergative causer and the absolutive direct object of the causativized verb, is then expected to be part of the competition for person agreement, as schematically represented in (38).

(38) Person agreement with lexical subjects in causatives: expectations



However, non-absolutive lexical subjects of causativized verbs are invisible to the person probe and remain inert for person agreement in the causative construction regardless of their person value. The sentences in (39) show that ergative, dative, and genitive subjects in the infinitival complement do not agree with the finite head, even when they are the only non-third person DP in the causative construction.

(39) No agreement with the non-absolutive subject of the causativized verb

- a. *pat'imat-le di-c:ε waca b-uc-i b-aq-ib(*-da).*
 Patimat-ERG I-ERG mouse(ABS) N.SG-catch:PF-INF N.SG-CAUS:PF-AOR-1
 'Patimat made me catch the mouse.'
- b. *pat'imat-le dami sika b-q̄h-i b-aq-ib(*-da).*
 Patimat-ERG I(DAT) bear(ABS) N.SG-see:PF-INF N.SG-CAUS:PF-AOR-1
 'Patimat showed me a bear.'
- c. *pat'imat-le di-la qurt'-i b-aq-ib(*-da).*
 Patimat-ERG I-GEN startle-LV:INF N.SG-CAUS:PF-AOR-1
 'Patimat caused me to startle.'

To summarize, three classes of deviations from the most straightforward derivation of person agreement can be identified: (i) internal arguments in the ergative, dative, and genitive cases do not agree, (ii) the dative argument with some experiencer verbs cannot trigger agreement, even though it is structurally the highest, (iii) non-absolute subjects of lexical verbs in the periphrastic causative construction are also excluded from the computation of person agreement. Unlike absolute arguments, which can control person agreement from any position, ergative, dative, and genitive arguments have only a restricted ability to agree, as expected of inherent cases (Rezac 2008).⁹ It is thus clear that some other factors are at play here in determining whether or not an argument will be cross-referenced on the verb.¹⁰

The last note before presenting the main proposal of this article concerns the phrase category of non-absolute arguments. In what follows, I assume that all arguments under discussion are DPs rather than PPs, thus ignoring a potential alternative account of the selective behavior of person agreement in Chirag (see Stepanov 2004, Markman and Grascenkov 2012, Polinsky 2016a on ergatives as PPs), for the following reasons. Section 2 above describes the patterns of complex reflexive binding in Chirag and demonstrates that ergative and dative subjects uniformly bind the complex reflexive, which is a strong indicator that those subjects are DPs, regardless of their case marking and agreement behavior. Relative clause formation is another environment that confirms the DP status of non-absolute subjects as well as of internal arguments. Relative clauses are expressed as prenominal participial clauses in Chirag with a gap at the extraction site. This technique is employed to relativize all kinds of clausal arguments, including absolute subjects and direct objects, non-absolute subjects, and internal arguments (examples not provided for space reasons; see Ganenkov [in preparation] for a descriptive account of relative clauses in Chirag). The absence of extraction asymmetries of the type that a PP analysis would predict thus suggests that all non-absolute subjects as well as dative and genitive internal arguments are DPs.^{11 12} The next section lays out the proposal that the agreement behavior of

⁹ Rezac (2008) remains one of a few attempts to tackle the question as to how theta-related inherent/lexical cases come to determine agreement. His specific proposal claims that arguments bearing inherent/lexical cases are PPs, which acquire the ability to agree when the ϕ -features of the complement nominal percolate to the P head and thus become visible to outside probes. Even though I am not in a position to discuss this proposal in full detail, we will see from the following discussion in this article that Rezac's analysis is not compatible with the empirical facts described here.

¹⁰ We could use the distinction between lexical and inherent cases (Woolford 2006) to account for why non-absolute internal arguments cannot control person agreement by saying that they bear lexical cases, which are exempt from competition for person agreement, whereas subjects bear inherent cases, accessible for agreement. While certainly useful, this distinction is not employed in the account proposed below for three reasons. First, the proposed difference between lexical and inherent cases with regard to regularity does not seem to be so obvious in Chirag. Along with truly idiosyncratic case marking of some internal arguments, many other VP-internal arguments, which supposedly bear lexical case, show a relatively transparent relation between their theta-role and case marking, such as recipients in ditransitive constructions, which are VP-internal in Chirag (see also footnote 16), addressees with speech verbs, or various 'source'-arguments, such as indirect objects with 'take (from)', 'steal (from)', 'hide (from)', and 'save (from)'. Second, the lexical vs. inherent distinction would not be in a one-to-one correspondence with the ability to control person agreement in Chirag. On the one hand, the genitive case of the subject of *qurt'i* 'startle' should be qualified as lexical, being a truly idiosyncratic non-structural case lexically selected by a particular verb. Yet, the genitive subject of *qurt'i* 'startle' can trigger person agreement. On the other hand, the dative case of the experiencer of *Ɓalat'Buxi* 'forget' or *urč'ili Bač'i* 'remember' is as good and regular as the dative case of the experiencer of *haBaxi* 'find out' or *Baħi* 'see' and can thus be regarded as inherent case. Yet, it cannot control person agreement. Third, the distinction between lexical and inherent case would not explain why non-absolute subjects participate in person agreement in finite clauses but remain inert when appearing in the infinitival complement of the causative construction. Accounting the agreement behavior of DPs in Chirag in terms of lexical and inherent cases would thus only complicate the picture and obscure a deeper similarity shared by all non-agreeing arguments.

¹¹ Chirag does not thus conform with Polinsky's (2016a) two-way typology of morphologically ergative languages, consisting of (i) PP-ergative languages, where the ergative is an inherent case, assigned by an (overt

a non-absolute DP in Chirag is contingent on a second case assignment operation to an argument in a specific structural position.

5 Proposal

Descriptively speaking, the three classes of mismatches between case and person agreement identified in the previous section can be generalized in the following form:

(40) The ability of a non-absolute argument to trigger person agreement is determined by its structural position: a non-absolute argument can compete for person agreement only if it is the highest argument in the c-command domain of T

This generalization immediately accounts for why internal arguments in non-absolute cases or non-absolute lexical subjects in the periphrastic causative cannot agree. Internal non-absolute arguments are always c-commanded by a subject, resulting in the permanent inability to control agreement, whereas lexical subjects in periphrastic causatives are separated from T by the ergative causer, thus also remaining inert for person agreement. In Section 7 below, I argue that non-agreeing dative arguments of experiencer verbs like *kalat'Buxi* 'forget' are c-commanded by an expletive in Spec,vP. Note that the structural condition in (40) does not say anything about agreement possibilities with the absolute argument. The absolute is the unmarked structural case not related to any specific thematic role and can always trigger person agreement, regardless of its grammatical function, be that the subject or the direct object.

I propose that the syntactic properties of agreeing non-absolute arguments are derived in two steps. They always start off as inherent and are assigned case by the functional head *v* together with their associated thematic role. Having inherent case, these arguments are not initially visible to the person probe residing on T. The ability of non-absolute arguments to participate in competition for person agreement arises later as a result of a second case assignment operation: *the functional head T assigns structural nominative case to the closest non-absolute argument in its c-command domain*. The non-absolute argument thus becomes visible to ϕ -probes due to the presence of the structural case feature [NOM] assigned on top of some inherent case feature, [ERG], [DAT], or [GEN]. Other non-absolute DPs still bear only inherent case, remaining invisible to the person probe on T. The specific proposal put forth in this article thus claims that the visibility of the DP highest in the c-command of T for agreement purposes arises by way of an additional case assignment operation, as spelled out in (41).¹³

(41) Non-absolute DPs bearing inherent/lexical case can agree by virtue of being assigned structural nominative case by T.

or silent) adposition, and (ii) DP-ergative languages, where the ergative is a DP in a structural case, assigned by a functional head. Instead, Chirag represents a third type, where the ergative argument is a DP carrying inherent case, assigned by a functional head.

¹² An anonymous reviewer also notes that the DP vs. PP distinction can be excluded using Occam's Razor, given that the structural position of a DP can straightforwardly predict its agreement behavior, as proposed in the next section.

¹³ One important assumption behind this proposal is that in a language with person agreement, structural cases are prime candidates for person agreement and are thus always visible to ϕ -probes. The presence of the structural [NOM] feature on a subject DP thus makes that DP visible for person agreement regardless of the inherent case feature it already carries. On a more general note, it remains to be seen whether case discrimination in person agreement is best captured in terms of the structural/inherent division, as the analysis here may suggest, or in terms of Moravcsik's hierarchy, as proposed by Bobaljik (2008).

In what follows, I argue for different pieces of this proposal. First, I discuss the causative construction and show that ergative, dative, and absolutive case assignment happens within ν P (6.1). I also demonstrate that these cases are inherent in the sense that they are associated with specific thematic roles and/or related to specific verbs (6.2). The mechanism of ν P-internal case assignment is explained in 6.3. Section 6.4 shows that non-absolutive case marking on subjects cannot be analyzed as dependent. Finally, in Section 7, I argue that the difference between agreeing subjects and non-agreeing subjects amounts to the difference in their structural positions.

6 Developing the argument

6.1 The infinitival complement of the causative verb is ν P

The first piece of my argument that non-absolutive subjects initially bear an inherent case relates to the phrasal category of the lexical layer in the causative construction: I argue that the infinitival complement of the causative verb is ν P, that is, a constituent including all clausal arguments with all thematic information assigned, but lacking any inflectional clausal heads. That the infinitival complement hosts all thematic arguments of the infinitive is immediately seen from case marking. As shown in Section 2.3, all thematic arguments of the causativized verb, including the subject, are in the cases required by the infinitive. We can conclude that the infinitival phrase contains the subject of the causativized verb, fully licensed with regard to thematic information and case marking, and thus cannot be anything less than ν P.

The second argument that the infinitival phrase contains a separate ν P layer can be made based on the fact that the periphrastic causative in Chirag is bi-eventive (see Folli and Harley 2007, Harley 2008, Levin and Rappaport Hovav 1995, Miyagawa 1998, Pylkannen 2008, Ramchand 2008, Tubino Blanco 2011 on bi-eventive causatives, and Wurmbrand 2001, 2014 on syntactic properties of reduced clausal complements). The infinitival complement denotes an event different from the causative event expressed by the matrix verb, as evident from the behavior of ν P-level adverbials, shown in (42).

(42) Event modification in the causative construction

- a. *dati-le gal-le markule zarple b-ert-i b-aq-ib.*
 father-ERG boy-ERG hayfield(ABS) quickly N.SG-mow:PF-INF N.SG-CAUS:PF-AOR.3
 ‘The father made the son quickly mow the hayfield.’ CAUS > *zarple* > ‘mow’
- b. *dati-le zarple gal-le markule b-ert-i b-aq-ib.*
 father-ERG quickly boy-ERG hayfield(ABS) N.SG-mow:PF-INF N.SG-CAUS:PF-AOR.3
 ‘The father immediately made the son mow the hayfield.’ *zarple* > CAUS > ‘mow’

Depending on the linear position, the ν P-level adverbial *zarple* ‘quickly, immediately, right away’ in example (42) can be interpreted as modifying either the infinitival complement or the causative verb. In (42a), the adverbial is embedded between the direct object of the infinitive and the infinitive itself and is preferably interpreted as modifying the infinitival phrase. In (42b), the adverbial precedes the entire infinitival phrase and is best parsed as belonging to the causative layer.

These two properties—the presence of the subject within the infinitival phrase and the bi-eventive interpretation of the causative construction—qualify the complement of the causative verb as minimally ν P.

At the same time, no properties associated with higher inflectional projections are observed in the infinitival complement of the causative verb. In particular, the infinitival

phrase cannot host future adverbials conflicting with the temporal interpretation of the causative layer, as shown in (43).

(43) No future adverbials in the causative construction

**pat'imat-le ʔale ʔurʂalli hanži-l-i e-j*
 Patimat-ERG Ali(ABS) tomorrow Makhachkala-OBL-DAT go:PF-INF
j-aq-ib.
 M.SG-CAUS:PF-AOR.3
 Intended: 'Patimat caused Ali to go to Makhachkala tomorrow.'

As example (43) shows, the infinitival phrase in the periphrastic causative cannot host a future-oriented adverbial, thus indicating that the complement is not a future infinitive and lacks not only TP but also Wurmbrand's (2001, 2014) *wol/P* located even lower on the clausal spine.

Furthermore, the infinitival phrase cannot have independent negation. A note of caution is in order here, because the negative prefix can be placed on either the infinitive or the causative verb, as in (44), which potentially could be analyzed as evidence for two independent domains of negation.

(44) Two possible sites of negation placement

- a. *ʔali-le pat'imat hanži-l-i e-j a^ʕ-r-aq-ib.*
 Ali-ERG Patimat(ABS) Makhachkala-OBL-DAT go:PF-INF NEG-F.SG-CAUS:PF-AOR.3
- b. *ʔali-le pat'imat hanži-l-i a^ʕ-j r-aq-ib.*
 Ali-ERG Patimat(ABS) Makhachkala-OBL-DAT NEG+go:PF-INF F.SG-CAUS:PF-AOR.3
 'Ali did not cause Patimat to go to Makhachkala.'

However, I contend that both possible sites of the negative prefix in (44) actually exemplify matrix negation, that is, negation placement is a morphological phenomenon, not reflecting directly where negation is in the syntax. First, both sentences in (44) have the same interpretation with negation scoping over the causative verb. The low scope of negation is not available (*'Ali caused Patimat not to go to Makhachkala'), even when the negative prefix is attached to the infinitive, as in example (44b).

Second, negation cannot be present on the causative verb and the infinitive simultaneously, as shown in (45).

(45) No double negation

**ʔali-le pat'imat hanži-l-i a^ʕ-j*
 Ali-ERG Patimat(ABS) Makhachkala-OBL-DAT NEG+go:PF-INF
a^ʕ-r-aq-ib.
 NEG-F.SG-CAUS:PF-AOR.3
 Intended: 'Ali did not cause Patimat not to go to Makhachkala.'

The ungrammaticality of (45) is unexpected on the assumption that the infinitival complement can host its own negation.

Third, the allomorph of the negative marker is always determined by the mood of the causative verb. In Chirag, most clauses, finite and non-finite, employ the negative prefix *a^ʕ-*, as in the examples above. However, some non-indicative moods, such as prohibitive (negative imperative) and optative, require the negative prefix *ma-*, as illustrated in (46).

(46) Different negative prefixes in indicative and non-indicative moods

- a. *ʔali-le qar-be a^ʕ-d-iʔ-un.*
 Ali-ERG apple-PL(ABS) NEG-N.PL-steal:PF-AOR.3
 ‘Ali did not steal the apples.’
- b. *qar-be ma-d-ilʔ^w-e!*
 apple-PL(ABS) NEG-N.PL-steal:IPF-PROH.TR
 ‘Do not steal the apples!’

In (46a), the indicative (Aorist) form of the verb *Biʔ^wi* ‘steal’ is negated by means of the prefix *a^ʕ-*. In (46b), the verb in the prohibitive form combines with the prefix *ma-*. In the causative construction, the choice of the negative prefix always depends on the mood of the causative verb, even when negation shows up on the infinitive, as in (47).

(47) Negation allomorphy in the causative

- a. *a^ʕ-la rus:e hanži-l-i e-j ma-r-irq-e.*
 you.SG-GEN girl(ABS) Makhachkala-OBL-DAT go:PF-INF NEG-F.SG-CAUS:IPF-PROH.TR
- b. *a^ʕ-la rus:e hanži-l-i ma-j r-irq-e.*
 you.SG-GEN girl(ABS) Makhachkala-OBL-DAT NEG+go:PF-INF F.SG-CAUS:IPF-PROH.TR
 ‘Don’t cause your daughter to go to Makhachkala.’

The fact the negative prefix *ma-* required by the matrix prohibitive can appear on the infinitive confirms that we are dealing with alternative placements of matrix negation rather than the possibility to independently negate the infinitival clause.

Fourth, the licensing of NPI elements in subject position of the causative verb also confirms that only matrix negation is available, as shown in (48).

(48) NPI licensing in the causative

- ʃi-k’al pat’imat hanži-l-i a^ʕ-j*
 who(ERG)-INDF Patimat(ABS) Makhachkala-OBL-DAT NEG+go:PF-INF
r-aq-ib.
 F.SG-CAUS:PF-AOR.3
 ‘Nobody caused Patimat to go to Makhachkala.’

In (48), the negative prefix morphologically attached to the infinitive licenses the NPI *čak’al* ‘nobody’ in the causative layer, which would be unexpected on the assumption the morphological placement of the negation marker is congruent with its attachment in syntax.

To summarize, the infinitival complement of the causative verb has the following four properties: (i) it hosts all arguments, including the subject, (ii) it is bi-eventive, (iii) it cannot host future-oriented adverbials, and (iv) it does not license independent negation. Based on these facts, I conclude that the infinitival layer in the periphrastic causative instantiates *vP*.

As shown in Section 2.3 above, all arguments of the infinitive, including the subject, show up in the cases determined within the infinitival complement, which, given the findings of this section, translates into the conclusion that non-absolute subjects receive their cases within *vP* and that higher inflectional heads, such as T, play no role in case assignment.

6.2 Theta-relatedness of non-absolute subjects

According to the inherent case approach to ergativity, the ergative DP receives its case together with the theta-role. Since inflectional heads are commonly held to be unable to assign theta-roles, the inherent case approach warrants *vP*-internal case assignment. The finding of the previous section that case assignment takes place within *vP* thus corroborates on the syntactic side the claim that all non-absolute DPs start off as having an inherent case.

On the semantic side, Chirag non-absolutive subjects are expected to display a tight association with specific theta-roles. In particular, inherent ergative case is usually assumed to be associated to the agent theta-role and, less restrictedly, to other related theta-roles, such as causer and instrument (Woolford 1997, Legate 2012).

The empirical facts observed in Chirag justify these expectations. Unlike absolutive arguments, which are not associated with any specific theta-roles or lexical verbs, non-absolutive subjects can have a limited inventory of theta-roles or appear with a limited number of lexical verbs. First, recall that the verb *qurt'i* ‘startle’ is the only genitive subject verb in the language. The genitive case of the subject is then evidently a lexical property of that verb and can uncontroversially be analyzed as inherent rather than structural. Second, dative subjects also appear with a closed set of lexical verbs and, as can be seen from the list in Section 2, all express the experiencer. No examples of dative subjects have been found that would have a theta-role other than the experiencer. Dative case then also satisfies the theta-relatedness condition on inherent case.

Third, ergative case is also tightly associated with certain individual theta-roles and can be considered inherent as well, even though the inventory of ergative subject verbs is much larger than that of genitive and dative subject verbs. More specifically, ergative subjects express a range of theta-roles related to causation, such as agent, causer, and instrument, as illustrated in (49).

(49) Thematic roles of the ergative subject

- a. *buk'm-a-d talt-me lamč d-irq'-le.*
wind-PL-ERG tree-PL(ABS) <sway> N.PL-do:IPF-DUR.3
‘The winds are swaying the trees.’
- b. *ja^f alχani-le meχ urs-l-aku.*
this saw-ERG iron(ABS) saw:IPF-DUR-NEG.3
‘This saw does not cut metal.’
- c. *q'ar-ma-la čej-le ʔale ʔaχ: w-arq'-ible.*
grass-PL-GEN tea-ERG Ali(ABS) good M.SG-do:PF-RES.3
‘The herbal tea cured Ali.’

Apart from the agent and human causer theta-roles illustrated earlier, the ergative subject can express the inanimate causer (force), as in (49a), and various kinds of instruments, as shown in (49b) and (49c). I therefore conclude that ergative case in Chirag bears an intimate relation to specific theta-roles rather than being assigned to all external arguments regardless of their theta-role.¹⁴

6.3 Case assignment in Chirag

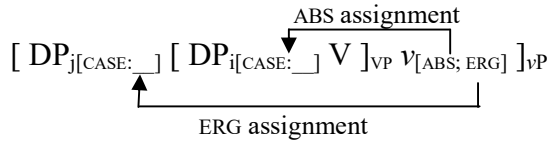
Reiterating the discussion above, I propose that the ergative is an inherent case assigned inside ν P. The ν P-internal analysis of case assignment in Chirag meshes well with what has been argued for in other Nakh-Daghestanian languages, such as Archi, Lak, and Tsez (Gagliardi et al. 2014, Polinsky 2016a, Polinsky 2016b), which is a welcome parallel, given a very similar empirical profile of case marking across the Nakh-Daghestanian family.¹⁵ I thus

¹⁴ From a wider perspective, the case marking of subjects with dyadic predicates in Nakh-Daghestanian languages has long been viewed as a lexical property of verbs, determined to a large extent by the subject’s theta-role (Kibrik 1977), which might thus be one of the earliest formulations of the inherent case view of ergativity, later dubbed *semantic ergativity* in Kibrik (1992, 1997).

¹⁵ It also aligns well with earlier proposals in the literature, suggesting that both subject and object cases in transitive clauses can be assigned *in situ*, that is, ν P-internally, in some languages (see Legate 2002 on Warlpiri, Aldridge 2004 on Tagalog, Coon et al. 2014 on Mayan).

assume that v_{tr} assigns structural absolutive case to the internal argument and inherent ergative case to the external argument merged in its specifier, as schematically represented in (50).¹⁶

(50) vP -internal case assignment in Chirag



An anonymous reviewer points out that the discussion above only establishes the vP -internal nature of non-absolutive arguments, whereas absolutive case could still be assigned by the matrix T, given that restructuring complements can be permeable to relationships with higher (matrix) heads. Note, first, that the main point of the discussion above is to make sure that T has nothing to do with *non-absolutive* cases on subjects. Therefore, my assumption that absolutive case assignment is also vP -internal would not be critical to the essence of the analysis proposed here.

Second, the opposite assumption that absolutive case, either on the intransitive subject or transitive object, is assigned by T would predict that absolutive should be impossible in non-finite environments (Legate 2002, 2008). In fact, all non-finite clauses in Chirag—nominalized, participial, and converbal—have their arguments in the exact same cases as in finite clauses, as illustrated in (51) for a nominalized clause, thus suggesting that the assumption that the transitive object and absolutive subject receive absolutive case from T is incorrect.¹⁷

- (51) a. [*a^l-la* *dati-le* *čime* *b-arq’-ni*]-*la* *b-urs-a*
 you.SG-GEN father-ERG bridge(ABS) N.SG-do:PF-NMLZ-GEN N.SG-tell:PF-IMP
 ‘Tell (us) about your father’s building of the bridge.’
- b. *na* *b-urs-in-da* [*du* *ħuž-l-i* *ag-ni*]-*la*
 now N.SG-tell:PF-IMM.FUT-1 I(ABS) hajj-OBL-DAT go:PF-NMLZ-GEN
 ‘Now I am going to tell (you) about my going to hajj.’

¹⁶ Alternatively, one could suggest, following Polinsky (2016b), that vP represents a layered structure with two exemplars of v : the lower v_1 merges with VP and assigns absolutive to the internal argument, whereas the higher v_2 merges with v_1P and assigns ergative to the external argument.

An anonymous reviewer also asks whether v would enter the derivation with three case values in ditransitive clauses. A preliminary answer is that it would not, since the recipient can be analyzed as bearing lexical/inherent case in Chirag. Recall that dative case in Chirag is basically a spatial case. Moreover, there is no single way to case-mark the “third” argument in ditransitive clauses. Verbs of speech have the addressee in a spatial case, called INTER (see Table 1). With regard to the recipient, the choice of case marking depends on whether the clause describes a change of ownership or just an act of physical transfer of an object from one participant to another. Thus, the verb *Biči* ‘give’ is used with the dative recipient in the former situation, but with a recipient in the spatial case AD in the latter situation (see Daniel et al. 2010 on differential recipient marking in Nakh-Daghestanian languages).

¹⁷ The internal structure of non-finite clauses requires a deeper study. Some non-finite clauses, such as controlled complements under desiderative predicates do host their own T (Ganenkov, under review), meaning that absolutive case assignment by T cannot be excluded in all non-finite environments. However, it is unlikely that T-assigned absolutive case would work across the board in all kinds of non-finite clauses in Chirag. In particular, converbal clauses in clause chaining only express aspect (perfective or imperfective), while their temporal interpretation is always inherited from the matrix clause, which may indicate that they lack any kind of T. Nevertheless, absolutive case is still licensed there despite the fact that converbal clauses are opaque for syntactic operations in the matrix clause (Ganenkov, in preparation).

One final note on ν P structure concerns gender–number agreement on lexical verbs, which always tracks the clausemate absolutive DP. Therefore, the entire argument presented here in support of ν P-internal absolutive assignment also applies to gender–number agreement. In what follows, I then assume that the gender–number probe resides on ν , searching for an argument in absolutive case.

6.4 Ergative case is not dependent

Having proposed a theory of ν P-internal case assignment in Chirag, I now have to consider another theoretical option, commonly held to be an alternative to case assignment by functional heads, namely, dependent case theory (DCT; Marantz 1991, McFadden 2004, Bobaljik 2008, Baker 2010, 2014, 2015, Baker and Bobaljik 2017). In Baker’s version of the DCT, case assignment occurs during the Spell-Out of a phase complement (VP complement of ν P, TP complement of CP). In a nutshell, the DCT mechanism evaluates pairs of NPs that do not have a case at the Spell-Out of a transitive clause and leaves one of them unmarked, while assigning a *dependent* case to the other. In nominative–accusative languages, the higher of the two arguments is unmarked, while the lower is in the marked accusative case. In ergative–absolutive languages, the lower argument is left unmarked, whereas the higher one is assigned the dependent ergative case.

There is enough evidence to believe that the distribution of ergative case in Chirag cannot be captured by the DCT.¹⁸ First, although somewhat rare, Chirag does have verbs that feature an ergative subject without having an absolutive direct object, such as the verb *dič’i* ‘care’ in example (52) repeated here from (30).¹⁹

(52) Indirect object in the genitive case

ʔali-le pat’imat-la d-ik’-l-aku.

Ali-ERG Patimat-GEN N.PL-care:IPF-DUR-NEG.3

‘Ali does not take care of Patimat.’

As can be seen, the subject is in the ergative case, even though no overt absolutive argument appears in this clause. Nothing would prevent us, of course, from speculating that there is a null absolutive here and, historically, the genitive indirect object is most likely a nominal dependent to an absolutive noun in the direct object position. However, I am unaware of any positive synchronic evidence that would confirm the actual presence of such an argument or point out to its identity in terms of semantic interpretation and relation with the genitive DP.

The second consideration concerns subject case marking with complement-taking matrix verbs. Baker (2015: 112–124) argues that case assignment is phase-bounded so that the presence of a DP in a (non-restructuring) complement should not have any effect on the case marking of DPs in the matrix clause. By contrast, if ergative case is inherent, the case marking of the matrix subject will be determined lexically by each specific matrix verb, regardless of the presence of a second DP. In other words, both ergative and absolutive marking of matrix subjects must be possible in the presence of the same type of clausal (non-nominalized, non-restructuring) complement. For example, as seen from the absolutive case

¹⁸ In the unaccusative applicative construction, the unaccusative subject still has absolutive case, whereas the applicative argument is in the dative. The diagnostic from unaccusative applicatives (Legate 2012, Baker 2014, Deal 2019) thus deviates from the most straightforward prediction of the DCT. However, alternative accounts of this pattern can be proposed, meaning that this construction is inconclusive evidence either for or against the DCT.

¹⁹ I exclude examples of complex predicates, such as *kumag barq’i* ‘help’ (lit. ‘do help’) or *q’ac’i* ‘bite’ (lit. ‘say a bite’) with the object in the dative case, from this discussion, since in all those cases one can safely assume that the nominal part of the complex predicate functions as a case competitor, creating conditions for the assignment of ergative case to the subject.

marking on the matrix subject in (53), embedded question complements or DPs inside them do not act as case competitors in Chirag.

- (53) *it-i-la* *ruc:ε* *q:ila* *r-ič-ib* [*it* *kala*
 DEM-OBL-GEN sister(ABS) realize F.SG-fall:PF-AOR.3 DEM(ABS) where
ag-ur-zil].
 go:PF-AOR-EQ
 ‘His sister figured out where he had gone.’

However, other matrix verbs taking an embedded question can license ergative case on their subject, even when there is no absolutive argument in the matrix clause, as shown in (54).

- (54) *a^ε-c:ε* [*it* *kala* *ag-ur-zil*] *a^ε-b-de*.
 you.SG-ERG DEM(ABS) where go:PF-AOR-EQ NEG-say:PF+AOR-2SG
 ‘You didn’t say where she had gone.’

Nothing in the behavior of the embedded questions in (53) and (54) can suggest that they are different in their syntactic properties. It would thus be an ad-hoc solution to propose that the complement in (54) is a case competitor triggering ergative case subject assignment to the matrix subject, whereas the embedded clause in (53) is inert for case assignment purposes, allowing the matrix subject to be assigned absolutive case.

Finally, uniform ergative marking of the causer in the causative construction, even in the absence of an absolutive argument, also suggests that ergative case in Chirag should not be analyzed as dependent. Consider, for instance, the sentence in (55).

- (55) *gal-le* [_{VP} *butun-n-i* [_{PartClause} *date* *w-ač'-ib-ze*]
 boy-ERG all-OBL-DAT father(ABS) M.SG-come:PF-AOR.PTCP-ATR
ha-b-aχ-i] *b-aq-ib*.
 PV-N.SG-find.out:PF-INF N.SG-CAUS:PF-AOR.3
 ‘The boy let everyone know that (his) father had come back.’

This example shows a causative construction based on the dative subject verb *haBaχi* ‘find out, learn’. Based on the DCT, nothing in the structure of this example would predict that the matrix subject (causer) should have ergative case. The infinitival complement of the causative verb only contains a quirky subject in the dative and a participial complement, none of which would compete with the matrix causer for case assignment: the experiencer subject is exempt from case competition because of the inherent case it bears, and participial clauses do not count for the computation of case either, as can be seen from (56), where the presence of a participial complement with the matrix verb ‘realize’ does not entail ergative case on the matrix subject.

- (56) *date* *niš* *q:ila* *b-ič-ib* [*gal-l-i* *la^ε*
 father(ABS) mother(ABS) realize M/F.PL-fall:PF-AOR.3 boy-OBL-DAT DEM
rus:ε *r-ik-an-ze*]
 girl(ABS) F.SG-like:IPF-PTCP-ATR
 ‘The parents realized that (their) son liked that girl.’

Furthermore, participial complement clauses constitute a separate domain for case assignment, so the presence of an absolutive argument inside it cannot trigger ergative case assignment outside, as, again, seen from (56), where the presence of an absolutive DP within

the participial complement does not trigger ergative case assignment to the matrix subject. This means that the absolutive DP ‘father’ inside the participial complement in (55) cannot be the reason for ergative case on the causer. Nor can the infinitival clause be considered a case competitor filling in the position of the absolutive direct object with the causative verb, simply because the latter does not license a direct object, as seen from the ungrammaticality of a DP complement with that verb in (57).

- (57) **rasul-le dɔwʔe b-aq-ib.*
 Rasul-ERG war(ABS) N.SG-CAUS:PF-AOR.3
 Intended: ‘Rasul caused a conflict.’

In a similar way, the periphrastic causative based on the genitive subject *qurt’i* ‘startle’ is expected to have the causer in absolutive case according to the DCT, contrary to fact, as demonstrated in (20), repeated here as (58).

- (58) *madina-le maḥmad-la qurt’-i b-aq-ib.*
 Madina-ERG Mahamad-GEN startle-LV:INF N.SG-CAUS:PF-AOR.3
 ‘Madina caused Mahamad to startle.’

Again, the infinitival clause neither includes an absolutive argument nor can count as occupying the absolutive direct object itself, as discussed above, thus failing to supply a case competitor required to license ergative case on the matrix subject.

We see that none of the DPs or complement clauses in (55) or in (58) can be analyzed as a case competitor that would motivate the assignment of ergative case to the causer in the causative construction. Together, the phenomena discussed above, I believe, present sufficient evidence that subject case marking is associated with specific lexemes rather than assigned based on the presence of another argument competing for case in the same Spell-Out domain. I therefore conclude that ergative case should not be analyzed as dependent in Chirag.

Summing up, the discussion of non-absolutive subjects in the past three sections has revealed that (i) all case assignment takes place within *vP*, (ii) non-absolutive subjects appear to be related to individual theta-roles and/or specific lexical verbs, (iii) ergative case assignment cannot be straightforwardly accounted for by the DCT. From the point of view of the inherent case approach, this constellation of properties might serve as a showcase of what inherent case could ideally look like. Note that indirect objects also bear inherent/lexical cases that are associated with theta-roles like recipient, goal, or source and are subcategorized for lexically by specific verbs. In this sense, then, the various types of non-absolutive arguments, including both subjects and internal arguments, are not that different from each other in Chirag. Yet, agreeing subjects in the ergative, dative, or genitive case have something that sets them apart from both internal arguments and non-agreeing dative subjects in the same cases. In what follows, I demonstrate that in addition to the inherent case properties coming from *vP*-layer, as argued above, a second structural layer related to the functional head *T* can be identified with agreeing non-absolutive subjects but not with other arguments. The ability of a certain DP to control person agreement then comes as a function of the phrase-structural configuration the DP appears in: all non-absolutive DPs initially have inherent case *vP*-internally and only later acquire additional properties when occupying the highest structural position in the *c*-command domain of *T*.

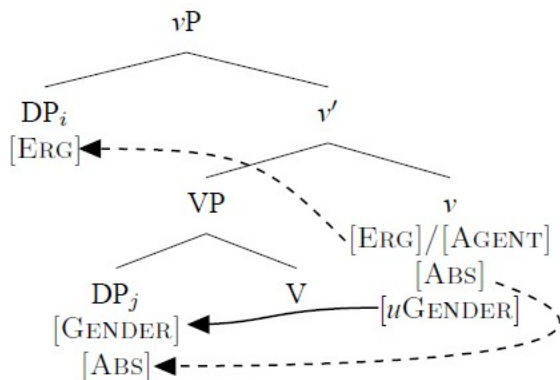
7 Person agreement correlates with structural position

The generalization in (40) has already formulated the main property separating agreeing non-absolute arguments from non-agreeing ones: whether or not a non-absolute argument agrees correlates with its structural position. Only those non-absolute arguments that are the highest in the c-command domain of T can trigger person agreement. For non-absolute internal arguments and embedded subjects in the causative construction, this is trivially true, since both are always below the subject and can thus never be the closest one to T.

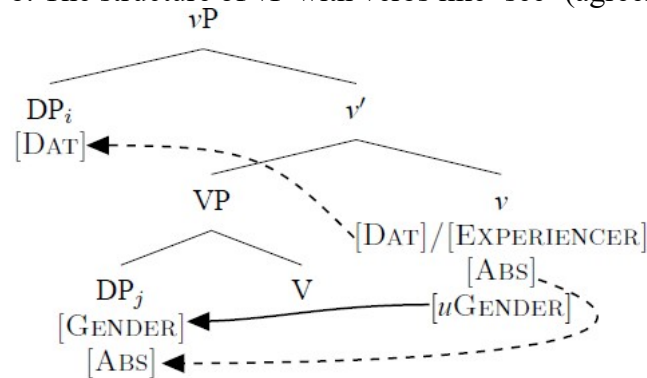
The only apparent exception to this generalization is non-agreeing dative subjects, which appear to occupy the highest structural position, as discussed above in Section 2, but still fail to trigger person agreement. In the next two sections I discuss empirical facts that suggest that non-agreeing dative subjects in finite clauses also obey (40), in contrast to agreeing non-absolute subjects. Specifically, I propose that non-agreeing dative arguments of experiencer predicates like *kalatbuçi* ‘forget’ are not subjects at all, instead occupying a VP-internal position, whereas the true subject of such predicates is a null expletive canonically located in Spec,vP, as shown in (59c). The structure of clauses with agreeing ergative and dative subjects according to the proposal in Section 6.3 is shown in (59a,b).

(59) vP-structure of dyadic predicates in Chirag

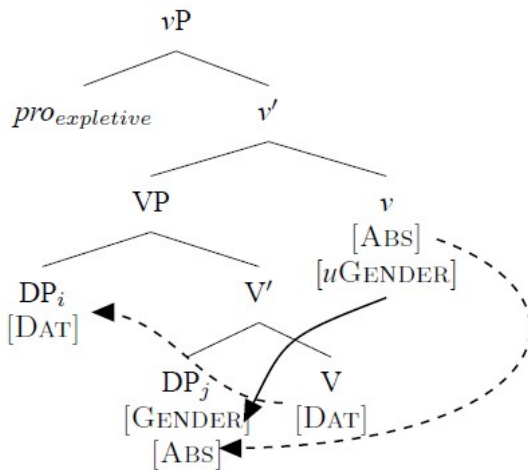
a. The structure of vP with transitive verbs (agreeing ergative subject)



b. The structure of vP with verbs like ‘see’ (agreeing dative subject)



c. The structure of vP with verbs like ‘forget’ (non-agreeing dative subject)



Two pieces of evidence indicate that the non-agreeing dative of experiencer predicates like *kalat'Buyi* 'forget' are not thematic subjects.

7.1 Person agreement correlates with obligatory control

The first piece of evidence is the behavior of non-absolute subjects in obligatory control (OC) constructions. It is well known that OC structures require the subject of the controlled clause to be referentially identical to the subject of the matrix clause (see Landau 2013 for an overview). The structural proposal for non-agreeing dative subjects in (59c) predicts that, unlike agreeing non-absolute subjects, they should not be able to participate in OC. Moreover, the fact that the subject of these predicates is assumed to be a null expletive predicts that they should not appear in OC at all. The behavior of subjects in OC must then correlate with their ability to trigger person agreement, since both properties target the highest DP in T's c-command domain. Below, I show that this prediction is confirmed by empirical facts: non-agreeing dative subjects are indeed different from other types of subject arguments in that they cannot participate in control structures.

First of all, absolutive, ergative, genitive, and agreeing dative subjects are able to appear in the position of the null subject in the controlled infinitival complement, for instance, with the verb *Bik:-* 'want', as shown in example (60).

(60) PRO in obligatory control: agreeing subjects

- a. *pat'imat-l-i* [$_i$ *ʔali-l-i* *uʔl-r-irg-i*] *b-ik:-le*.
 Patimat-OBL-DAT ABS Ali-OBL-DAT eye-F.SG-stay:PF-INF N.SG-want:IPF-DUR.3
 'Patimat wants to look at Ali.'
- b. *pat'imat-l-i* [$_i$ *qqr-be* *d-iʔ^w-i*] *b-ik:-le*.
 Patimat-OBL-DAT ERG apple-PL(ABS) N.PL-steal:PF-INF N.SG-want:IPF-DUR.3
 'Patimat wants to steal the apples.'
- c. *pat'imat-l-i* [$_i$ *sik-ne* *d-qh-i*] *b-ik:-le*.
 Patimat-OBL-DAT DAT bear-PL(ABS) N.PL-see:PF-INF N.SG-want:IPF-DUR.3
 'Patimat wants to see the bears.'
- d. *pat'imat-l-i* [$_i$ *qurt'-i*] *a^ʃ-b-ik:-le*.
 Patimat-OBL-DAT GEN startle-LV:INF NEG-N.SG-want:IPF-DUR.3
 'Patimat does not want to startle.'

In these sentences, the dative subject of the matrix verb *Bikr-* ‘want’ determines the reference of the null infinitival subject regardless of the case of the latter.²⁰ In contrast, non-agreeing dative subjects cannot function as the controlled null argument in the infinitival construction with ‘want’, as in (61).

(61) PRO in obligatory control: non-agreeing subjects

**pat’imat-l-i_i* [*—_i* *ʔale* *ʋalat’-uχ-i*] *b-ikr-le*.
 Patimat-OBL-DAT DAT Ali(ABS) forget-(M.SG)LV:PF-INF N.SG-want:IPF-DUR.3
 ‘Patimat wants to forget Ali.’

Note also that the absolutive argument with non-agreeing dative subject verbs cannot be controlled by the matrix subject either, just like other absolutive direct objects, as shown in (62).

(62) PRO in obligatory control: absolutive direct objects

- a. **pat’imat-l-i_i* [*ʔali-l-i* *—_i* *ʋalat’-r-uχ-i*] *b-ikr-le*.
 Patimat-OBL-DAT Ali-OBL-DAT ABS forget-F.SG-LV:PF-INF N.SG-want:IPF-DUR.3
 Intended: ‘Patimat wants Ali to forget her.’
- b. **pat’imat-l-i_i* [*ʔali-l-i* *—_i* *r-qh-i*] *b-ikr-le*.
 Patimat-OBL-DAT Ali-OBL-DAT ABS F.SG-see:PF-INF N.SG-want:IPF-DUR.3
 Intended: ‘Patimat wants Ali to see her.’
- c. **pat’imat-l-i_i* [*ʔali-le* *—_i* *r-ibq-i*] *a^ɛ-b-ikr-le*.
 Patimat-OBL-DAT Ali-ERG ABS F.SG-deceive:PF-INF NEG-N.SG-want:IPF-DUR.3
 Intended: ‘Patimat does not want Ali to deceive her.’

Likewise, a non-subject non-absolutive DP can never be the controlled argument of the infinitival complement.

(63) PRO in obligatory control: non-subjects

**pat’imat-l-i_i* [*ʔale* *—_i* *u^ʔl-irg-i*] *b-ikr-le*.
 Patimat-OBL-DAT Ali(ABS) DAT eye-(M.SG)stay:IPF-INF N.SG-want:IPF-DUR.3
 Intended: ‘Patimat wants Ali to look at her.’

We thus see that the distinction between subjects that are able to trigger agreement and those that are not correlates with their behavior in controlled infinitives. The analysis proposed here relates these properties by claiming that both phenomena deal with the highest DP in T’s c-command domain. Most verbs have a non-expletive subject which is visible for the purposes of OC and nominative case assignment by T, whereas verbs like *ʋalat’Buχi* ‘forget’ have a null expletive in the thematic subject position, intervening between T and the dative argument and thus rendering the latter inaccessible for OC and nominative case assignment.

An alternative analysis of non-agreeing dative subject verbs could assume that these verbs are dyadic unaccusatives with no additional null expletive in Spec,vP (and no Spec,vP in the first place). However, unaccusative predicates, be they monadic or dyadic, are known to behave like other verbs with respect to OC: they normally have an argument that moves to Spec,TP to satisfy EPP on T and can serve as an embedded controlled subject in OC. The

²⁰ A detailed argument that the infinitival complement with desiderative predicates represents OC is presented in Ganenkov (under review). See also Ganenkov (2019) for the argument that infinitival complements of desiderative verbs instantiate OC in the closely related Khuduts Dargwa.

unaccusative analysis would thus predict that *ƚalat’Buχi* ‘forget’ and other verbs with non-agreeing subject-like arguments can appear in controlled complements, contrary to fact.

7.2 Person agreement correlates with the ability to be the addressee of the imperative

Another piece of evidence that non-agreeing dative subjects are not subjects at all comes from imperatives. The ability to be the addressee of the imperative is another well known property of thematic subjects (Keenan 1976). In Chirag imperative sentences, ergative, genitive, and agreeing dative subjects function as the addressee, as in (64).²¹

(64) Imperative addressee: agreeing subjects

- a. *pro_i š’a elg-e!*
ABS home.LOC stay:PF-IMP
‘Stay home!’
- b. *pro_i b-urs-a ca χabar.*
ERG N.SG-tell:PF-IMP one story(ABS)
‘Tell (us) a story.’
- c. *pro_i di-la rus:e r-aħ-a!*
DAT I-GEN girl(ABS) F.SG-see:PF-IMP
(talking to a physician) ‘Examine my daughter!’ (lit. ‘see my daughter’)
- d. *pro_i qurt’-ma-durč’-i-ta.*
GEN startle-PROH-LV:IPF-PROH.TR-2PL
(addressing a group of people) ‘Don’t startle!’

Note that the ability to serve as the addressee of an imperative utterance is not restricted to agents, as can be seen from (64c), with the experiencer functioning as the imperative addressee. Moreover, patientive intransitive subjects are also possible as the addressee in imperative clauses, as in (65), showing that the grammatical ability of the subject to serve as the imperative addressee transcends the patient theta-role of the argument and the pragmatic awkwardness of some of such utterances.

(65) Imperative addressee: patientive intransitive subject

- a. *pro_i j-ebč’-e!*
ABS M.SG-die:PF-IMP
‘Die!’
- b. *pro_i b-ac’-e!*
ABS N.SG-melt:PF-IMP
‘Melt!’ (as in addressing snow)

Despite having the patient theta-role, the subjects of ‘die’ and ‘melt’ are perfectly normal as the addressee of the imperative. In sharp contrast to that, the non-agreeing dative argument of *ƚalat’Buχi* ‘forget’ is distinctly ungrammatical.

(66) Imperative addressee: non-agreeing dative subject

- **pro_i di-la rus:e ƚalat’-r-uχ-e!*
DAT I-GEN girl(ABS) forget-F.SG-LV:PF-IMP
Intended: ‘Forget my daughter!’

²¹ The subjects in imperative clauses can also be overtly expressed, in the case required by the verb.

Just like in obligatory control, the absolutive argument in the latter case cannot be the addressee of the imperative either, as in example (67).

(67) Imperative addressee: absolutive direct object

**pro_i butun-n-i kalat'-r-uχ-e!*
 ABS all-OBL-DAT forget-F.SG-LV:PF-IMP

Intended: 'Get forgotten by all (people)!'

The behavior of various types of arguments in imperatives again gives us evidence that neither the non-agreeing dative argument nor the absolutive argument with verbs like *kalat'buχi* 'forget' is the subject. Instead, they are impersonal predicates with a null expletive pronoun in the subject position.

Summing up, we see that the dative subject-like arguments of the verb *kalat'buχi* 'forget' and similar verbs differ from non-absolutive subjects not only in their inability to trigger person agreement, but also in their behavior in some other syntactic environments, such as obligatory control and imperatives. Both person agreement and these other properties receive a natural explanation once we assume that both the dative and absolutive argument are below *v*, whereas Spec,*v*P hosts a null expletive, as shown in (59c) above. On this analysis, dative subject-like arguments also conform to the generalization in (40).²²

8 Derivation

In the preceding discussion, the ability of a non-absolutive subject to control person agreement has been shown to correlate with the structural position of that subject. It is not immediately clear what in the theory would account for the direct connection between the two phenomena in a natural way. Recall, however, that besides agreement, the functional head T is theoretically known to be associated with another syntactic operation: case assignment. For example, a connection between agreement and case assignment is commonly assumed for accusative languages. Many ergative languages also require the involvement of T to license the argument in absolutive case (Legate 2008). The *v*P-internal proposal laid out above for case assignment in Chirag clearly does not need T to account for the overt case marking of DPs. However, the idea that the functional head T is nevertheless somehow involved in case assignment would allow us to establish a theoretical connection between the structural position of a non-absolutive argument and its ability to control person agreement. More specifically, I suggest that T bears an additional case feature, assigned to the closest DP in its c-command domain. The feature in question could standardly be nominative case,

²² There is nothing sacred about the particular analysis in (59c), and future research may reveal another derivation that would present a better account, as long as the following three properties of non-agreeing dative "subjects" are derived. First, the dative DP c-commands the absolutive DP, as evidenced by complex reflexive binding; see Section 2.2. Second, neither of the DPs is located in Spec,*v*P, as evidenced by their inability to be the addressee in an imperative clause. Third, something must block either DP from moving to Spec,*v*P or from being assigned nominative case by T *in situ*, as suggested by their inability to trigger person agreement or participate in OC. One assumption that seems necessary for deriving such a picture is that both DPs are merged below *v*, with the dative DP c-commanding the absolutive DP. However, that assumption would not be sufficient, since the arguments of such dyadic unaccusative predicates are known to be accessible by T for various syntactic purposes (see, for example, Baker 2017 on agreement in Burushaski and Davison 2004 on OC in Hindi-Urdu). Nothing in theory would then prevent one of the arguments from being assigned nominative case by T *in situ*, with consequences for person agreement, or from moving to Spec,*v*P, thus unifying them with regular subjects merged in Spec,*v*P, with repercussions for their behavior in imperative clauses, OC, and person agreement. The present analysis ensures that all these operations are blocked by filling in the vacant Spec,*v*P position with a null pronominal.

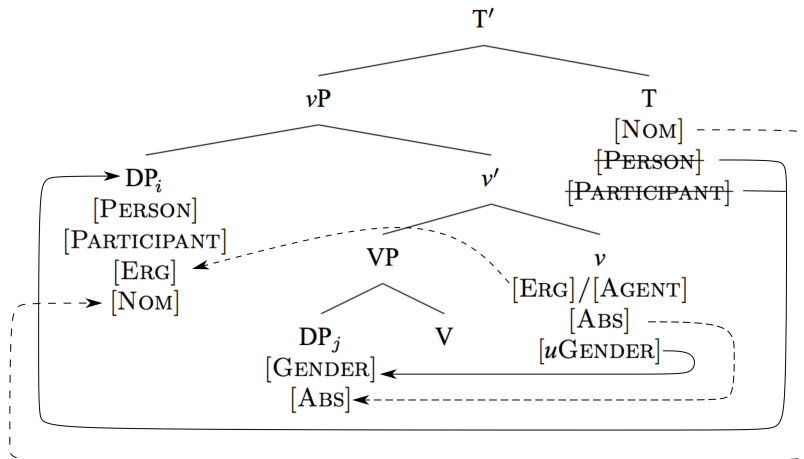
structural in syntax and null in surface morphology, which would make the DP visible to ϕ -probes, as proposed in (41) above.²³

Below, I show how this theoretical proposal derives person agreement in Chirag. The derivation in (68) shows a regular transitive sentence with the first person ergative subject. (69) describes the derivation in a bottom-up fashion.²⁴

(68) Transitive verb with the first/second person subject

- a. *di-c:ə u^f gap-w-arq'-ib-da.*
 I-ERG you.SG(ABS) praise-M.SG-LV:PF-AOR-1
 'I praised you.'

b.



- (69) i. A DP merges in the position of the complement of VP.
 ii. v merges having two valued case features—absolutive and ergative—and the unvalued gender–number feature.
 iii. The gender–number probe on v searches its c-command domain and finds the DP in the VP complement.
 iv. v receives the gender–number value from the DP and discharges its absolutive case feature.
 v. Another DP is merged in the specifier of v P.
 vi. The DP receives the agent/causer theta-role and inherent ergative case from v .
 vii. T is merged, bearing the unvalued person feature and the valued nominative case feature.
 viii. The DP in Spec, v P is detected by T as the highest DP in its c-command domain and receives structural nominative case from T.
 ix. The person probe on T relativized to [[person] participant] searches for a goal having a structural case feature in T's c-command domain.

²³ An anonymous reviewer points out that the proposed system results in a many-to-many correspondence between case-assigning functional heads and nominal arguments. On the one hand, as laid out in Section 6.3, the little v head assigns case to two different DPs, absolutive case to the intransitive subject/transitive direct object and ergative case to the transitive subject. On the other hand, as proposed in Section 5 and reiterated here, the subject is also assigned nominative case by T.

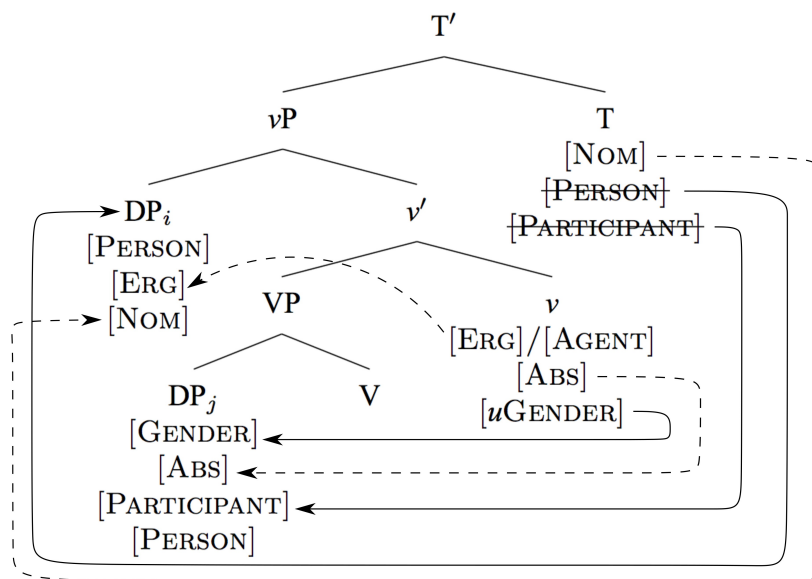
²⁴ Dashed lines show case assignment, solid lines show Agree relations. For the sake of simplicity, only the ϕ -features responsible for overt agreement are shown in the figures below. For, example, both DPs in (68b) have both a gender feature and a person feature. However, only the gender feature, but not person feature, is annotated on DP_j, whereas DP_i is only specified as [person; participant] with no gender feature indicated. Finally, although I implement person agreement here via the operation Agree in the narrow syntax, the proposal for case assignment here is also compatible with postsyntactic approaches to agreement as long as phi-probes are able to probe for specific case features in the postsyntax.

- x. The DP in Spec,vP carries the [NOM] feature visible to the person probe and can thus value the person feature on T.
- xi. The entire featural structure of the person probe on T is checked off due to Agree with the first person ergative subject; the verb shows morphological agreement with the subject.

The derivation in (70) shows a transitive sentence with the third person ergative subject and the second person direct object.

(70) Transitive verb with the third person subject

- a. *pat'imat-le u^ʃ gap-w-arq'-ib-de.*
 Patimat-ERG you.SG(ABS) praise-M.SG-LV:PF-AOR-2SG
 'Patimat praised you.'
- b.

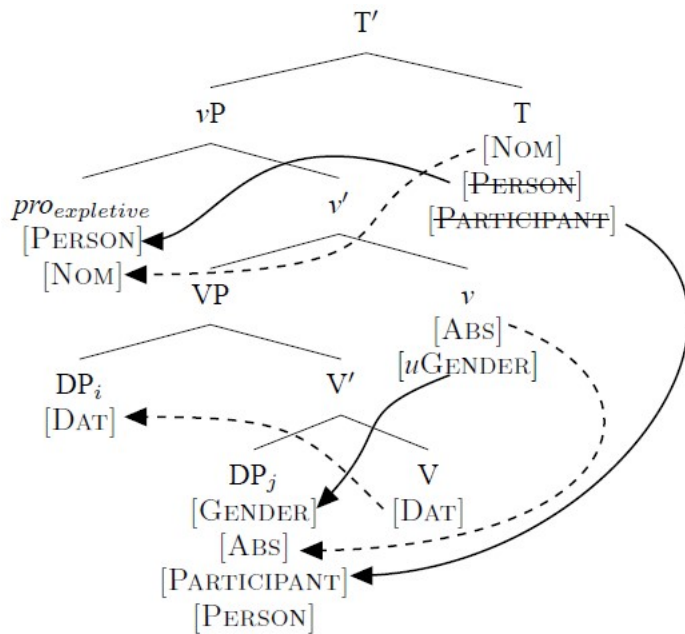


The derivation of this sentence repeats all the steps of the derivation in (69), with the difference that only the [person] feature of T is checked off after the Agree relation is established between T and the third person ergative subject at step (xi). The probe thus scans further down the c-command domain and finds the direct object in the structural absolutive case. The second cycle of Agree occurs with the second person absolutive DP, which checks off all the features on the probe, overriding the Agree relation with the subject established earlier.

The derivation of sentences with agreeing dative subjects proceeds in the same fashion, with the only difference that the subject receives inherent dative case and the experiencer theta-role instead of ergative case and the agent/causer theta-role at step (vi) in (69). The derivation of sentences with non-agreeing dative subjects, though, is different, due to the fact that these arguments are merged in VP-internally below a null expletive in Spec,vP, and cannot thus be seen for case assignment purposes, with implications for person agreement, as shown in (71).

(71) Person agreement with *ʋalat'Buyi* 'forget'

- a. *dami u^ʃ ʋalat'-uχ-ub-de.*
 I(DAT) you.SG(ABS) forget-(M.SG)LV:PF-AOR-2SG
 'I forgot you.'
- b.



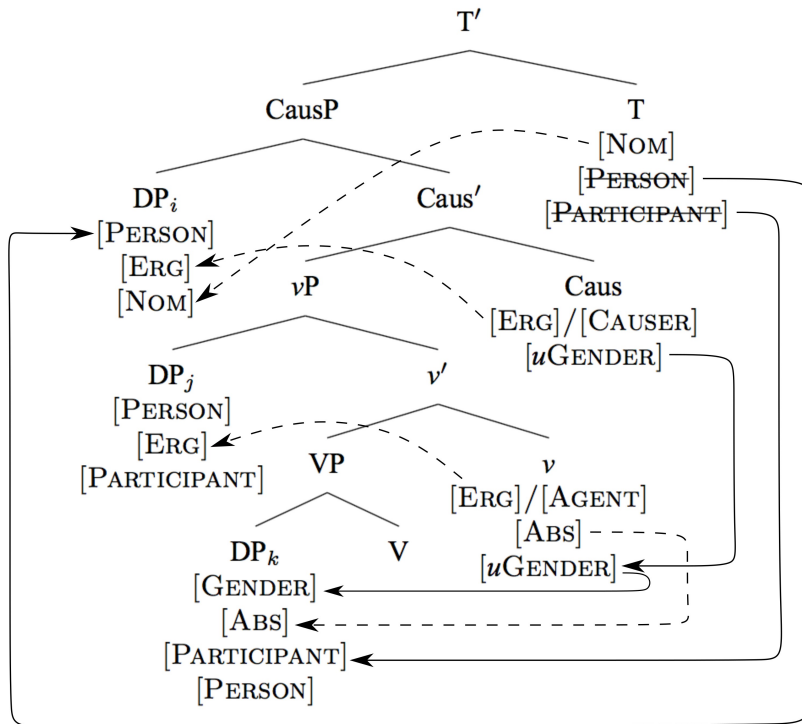
As can be seen in (71b), the subject of the verb *khalat'buχi* 'forget' is merged VP-internally, receiving the experiencer theta-role and dative case from V, whereas the Spec,vP position is occupied by a null expletive. The dative experiencer DP of *khalat'buχi* 'forget', therefore, cannot be seen by T for nominative case assignment, which has one important consequence for the subsequent derivation: the dative argument remains invisible for the person probe on T. The null expletive receives nominative case instead. However, since it is third person, it cannot discharge the [participant] feature on T and thus always gives way to agreement with the lower absolutive argument bearing [participant], similar to what happens in examples like (70) above.

As discussed above, the proposed derivation connecting the agreement behavior of a DP to its structural position also provides a natural account of why indirect objects can never control person agreement. Since the indirect objects never occupy the highest structural position in the clause, they can simply never be seen for nominative case assignment and, as a result, never enter the Agree relation with T.

The absence of person agreement with the first/second person subject of the causativized verb is derived as shown in (72) and (73).

(72) No agreement with the non-absolutive subject of the causativized verb

- a. *pat'imat-le di-cε u^f r-uc-i r-aq-ib-de.*
 Patimat-ERG I-ERG you.SG(ABS) F.SG-catch:PF-INF F.SG-CAUS:PF-AOR-2SG
 'Patimat made me catch you.'
- b.



- (73)
- i. A DP merges in the position of the complement of VP.
 - ii. v merges having two valued case features, absolutive and ergative, and the unvalued gender–number feature.
 - iii. The gender–number probe on v searches its c-command domain and finds the DP in the VP complement.
 - iv. v receives the gender–number value from the DP and discharges its absolutive case feature.
 - v. Another DP is merged in the specifier of vP .
 - vi. The DP receives the agent/causer theta-role and ergative case from v .
 - vii. Caus is merged, bearing the unvalued gender–number feature and the valued ergative case feature.
 - viii. The gender–number probe on Caus searches for a goal in its c-command domain and receives the features of the absolutive argument. I remain non-committal on whether the Agree relation is established with the absolutive argument itself or with the v head, already having the features of that argument.
 - viii. Another DP is merged in the specifier of CausP.
 - ix. The DP receives the agent/causer theta-role and ergative case from Caus.
 - vii. T is merged, bearing the unvalued person feature and the valued nominative case feature.
 - viii. The DP in Spec,CausP is the highest one in T's c-command domain and is assigned structural nominative case by T.
 - ix. The person probe on T specified as [[person] participant] searches for a goal in a structural case.
 - x. The ergative causer DP is structural with the [NOM] feature and can thus value the person feature on T.
 - xi. Only the [person] feature of T is checked off after the Agree relation is established between T and the third person ergative causer.
 - xii. The probe scans further down the c-command domain. The ergative lexical subject bears inherent case and cannot be seen by the person probe. Nor can it ever receive structural nominative case from T, being always separated from the latter by the

ergative causer. It thus remains invisible with respect to person agreement and cannot value T's unvalued person features. The person probe then finds the direct object in the structural absolutive case. The second cycle of Agree occurs with the second person absolutive DP, which checks off all the features on the probe, overriding the Agree relation with the ergative causer established earlier.²⁵

9 Discussion

The discussion above presents arguments in favor of the claim that two functional heads, ν and T, participate in the derivation of syntactic properties of non-absolutive subjects in Chirag. The case borne by a DP in overt morphology, such as the ergative, dative, or genitive, on the one hand, and the ability to control person agreement, on the other hand, have different derivational sources. As discussed above, the causative construction provides us with a window into the derivational history of non-absolutive subjects. All arguments already have their case marking in place within the infinitival ν P-complement of the causative verb, but have not been endowed with the ability to trigger person agreement. This fact meshes well with the inherent case approach to case assignment in morphologically ergative languages and accounts for the close association of non-absolutive subjects with specific thematic roles. In line with the inherent case approach, I therefore suggest that cases like ergative, genitive, and dative are assigned to the subject ν P-internally, by the functional head ν together with the thematic role. That head is responsible for the inherent case part of the properties of non-absolutive subjects, specifically, the cases they bear in overt morphology. The structural case part of their properties, such as person agreement, is missing at this derivational point. I suggest that it appears as the result of interaction between the DP and the functional head T, specifically, nominative case assignment to the DP by T. The selectivity of person agreement with regard to ergative, dative, and genitive DPs thus follows from the structural position of those DPs. It is the structural position of a DP that is critical for person agreement of non-absolutive arguments in Chirag. Since nominative case can only be assigned to the highest DP in T's c-command domain, arguments located in other positions, including non-absolutive internal arguments, embedded subjects in the periphrastic causative, and non-agreeing dative experiencers never agree.²⁶

The possibility of multiple case assignment seems to be a viable theoretical option, which, in particular, has been invoked to account for the syntax of Icelandic non-nominative subjects (Belletti 1988, Béjar and Massam 1999, Frampton and Gutmann 1999, Chomsky 2000). Non-absolutive subject DPs would thus have two case features. The nominative case assigned on top of an inherent case that the DP already bears would therefore render that DP

²⁵ This analysis assumes that ν P and CausP are not phase boundaries so that the absolutive DP in the infinitival clause remains active and accessible to the matrix T, thus running against Chomsky's (2001) Phase Impenetrability Condition. I set the issue of phases aside in this article, given that phasehood has not yet been studied in Chirag or any other Nakh-Daghestanian language. However, I anticipate that this assumption should not be a problem for the following reasons. First, the literature has not come to a consensus yet about phases and phase-based locality, meaning that there is no single set of definitions and assumptions to test Chirag data against (see Nevins 2005 and Bošković 2007 who argue against the Activity Condition and Bhatt 2005 for an example of work assuming that phasehood does not prevent higher functional head from agreeing with an embedded argument). Second, even if either ν or Caus is a phasal head and can potentially restrict agreement, a number of current proposals, such as den Dikken's (2007) Phase Extension or Gallego's (2010) Phase Sliding, allow extension of Spell-Out domains as a result of head movement. One could argue, it seems, that Chirag does have V-to- ν -to-T movement, which would allow the matrix T to agree with an embedded absolutive argument due to phase extension.

²⁶ An anonymous reviewer notes that a passive construction where an internal argument in an oblique case could be promoted to subject would present a good testing ground for the proposal. The proposal developed here predicts that such derived subjects would trigger person agreement, while also retaining their oblique case morphology. However, Chirag does not have passivization of any kind.

structural and visible to the person probe on T. Morphologically, this analysis would assume case stacking where the null exponent of nominative case would appear on top of the overt ergative case suffix (see Richards 2013, Assmann et al. 2014 on multiple case assignment as case stacking).

While the main issue with this proposal remains that we have no surface evidence for case stacking, due to the assumed nullness of nominative case exponence, it would allow us to keep the assumption that only DPs in structural cases can trigger agreement, though the relation between case and agreement is reverse compared to what is assumed under the agreement-based theory of case assignment, such as Chomsky 2000, 2001 (see Baker 2008, 2013, 2015, among others, for a discussion of the relation between structural case and agreement). While absolutive case is structural by default, the behavior of non-absolutive subjects would be accounted for by multiple case assignment (Béjar and Massam 1999): inherent case assignment by v and structural case assignment by T. DPs in cases other than the absolutive are initially assigned inherent case and acquire the structural status only by virtue of the assignment of nominative case on top of it, which is contingent on its highest structural position in the c-command domain of T.²⁷

The morphologically ergative system of Chirag Dargwa would thus underlyingly be a familiar system with two structural cases: one is assigned by v (structural accusative, morphological absolutive; cf. Legate 2008), the other is assigned by T (structural nominative, null in morphology), just like the system of case assignment in accusative languages. Morphological ergativity is a notoriously diverse phenomenon. Unlike accusative alignment, where case assignment seems to be fairly homogeneous across languages, ergative–

²⁷ An anonymous reviewer asks how the ability of a non-absolutive subject to trigger person agreement on T affects gender–number agreement, that is, whether gender–number probes are in principle able to target non-absolutive subjects. On the multiple case assignment theory proposed here, we could expect that some gender–number probes could see non-absolutive subjects. Assuming that gender–number agreement on lexical verbs occurs on v before nominative case assignment by T, we do not expect lexical verbs to agree with inherent case-marked subjects. The reviewer suggests that a good testing ground for this could be long-distance agreement, where an embedded non-absolutive subject would receive nominative from the embedded T and thus become visible to the gender–number ϕ -probe on the matrix v . Unfortunately, long-distance agreement in Chirag is only allowed on a very limited basis and, in cases where it is allowed, the complements cannot be unambiguously analyzed as TPs (but rather as v Ps or AspPs), which would mean that nominative case is not assigned to the embedded subject and would thus explain why long-distance agreement with the embedded subject is not possible.

One piece of empirical evidence to support this speculation could be the behavior of agreeing adverbs. Like some other Nakh-Daghestanian languages (see Bond et al. 2016 on Archi), Chirag has adverbs that show gender–number agreement: *Buhar* ‘just’ and *Buχile* ‘may be’. Unlike gender–number agreement on verbs, the adverbs can agree with either the absolutive direct object or the non-absolutive subject (but not other non-absolutive arguments), as demonstrated in (i).

- (i) *pat’imat-le qqr-be saq:ib { d-uχile / r-uχile }.*
 Patimat-ERG apple-PL(ABS) bring:PF-AOR.3 N.PL-may.be F.SG-may.be
 ‘Patimat may have brought some apples.’

Here, the adverb *Buχile* ‘may be’ agrees with either the absolutive direct object (neuter plural agreement) or the ergative subject (feminine singular agreement). Assuming that the adverb is CP-adjoined, this agreement pattern can be naturally accounted for on the nominative case assignment theory discussed here. Unlike gender–number agreement on verbs, which occurs on v before the lexical subject receives nominative case in Spec,TP, CP-adjoined adverbs are merged after the non-absolutive subject receives structural nominative case and thus becomes visible not only to the person probe on T, but also to all agreement probes above it, including CP-adjoined adverbs. Whether this evidence is admissible depends very much on how gender–number agreement with the adverbs is actually derived (see Polinsky et al. 2017 for analysis of non-verbal agreement in Archi and Rudnev 2020 for a discussion of non-verbal agreement in Avar), an issue I have to leave outside the scope of the present discussion.

absolute systems have been shown to work differently in different languages (see Deal 2015, Polinsky 2016a, Sheehan 2017 for recent overviews). In accusative languages, the two structural cases—nominative and accusative—are invariably assigned by the two functional clausal heads v and T. In ergative languages, ergative case has been analyzed as inherent or structural, assigned by v or T, respectively. While being undoubtedly structural, absolute case can also be assigned in different loci, either v or T, in different ergative languages (Legate 2002, 2008; Aldridge 2004; Coon et al. 2014). One of the most prominent lines of research suggests that ergative case is assigned by the functional head v together with the agentive theta-role and is thus an inherent case rather than a structural case. Morphological ergativity in Chirag can then be analyzed as accusativity plus additional inherent ergative (cf. Woolford 1997). The present article demonstrates that the properties of ergative DPs in Chirag can be decomposed into two layers, thus distinguishing the effects of inherent ergative case and structural nominative case.

However, it is also clear that the proposed nominative case assignment cannot account for the behavior of non-absolute subjects (including ergative subjects) in all morphologically ergative languages. For example, ergative subjects in Hindi are the highest in T's c-command domain (Anand and Nevins 2006), yet, they cannot determine agreement on the verb and are commonly analyzed as inherent, which means that this structural position does not necessarily entail structural status or visibility to the Agree probe. A structural parallel in nominative–accusative alignment can be observed in Icelandic dative subjects, which are commonly analyzed as bearing inherent case received within VP. Like in Hindi, Icelandic dative subjects do not trigger agreement even though they c-command other clausal arguments and behave like nominative subjects with regard to EPP-driven movement to Spec,TP, obligatory control, and other subjecthood properties (Zaenen et al. 1985 and subsequent literature).

On the multiple case assignment theory proposed above, the difference could be accounted for in terms of parametrization of the ability of T to assign structural case to a DP that already has inherent case (or, rather, the ability of DPs in inherent cases to be assigned additional structural case). As Béjar and Massam (1999) independently show, some languages allow structural case assignment over inherent case assignment, whereas other languages do not. I suggest that the difference with respect to the ability of an inherent-cased subject to control agreement may reflect this underlying parametrization.

From a historical point of view, this parametrization could be naturally viewed as representing different steps in a process of “structuralization” of ergative case. From diachronic studies of ergativity, we know that it may be a relatively unstable phenomenon from the point of view of diachrony. Starting off as PPs, ergative subjects are attested to drift towards inherent-cased DPs and then further to regular structural-cased DPs, as in Iranian and Indo-Aryan languages (Haig 2008, see also a discussion of diachrony in Polinsky 2016a and references therein). In the earlier stages of this process, the transitive subject assigned ergative case within vP is immune to T-case assignment, which has no visible effects on the behavior of that argument. Languages like Hindi could instantiate this subspecies of ergative case that appears as inert with respect to agreement. While the details and specific structural changes occurring along the way remain to be revealed, the next stage of “structuralization” apparently makes the ergative DP accessible to nominative case assignment, leading to the situation where the transitive subject bears ergative case in morphology but also acquires nominative case and, as a result, shows the behavior of a DP in structural case, for example, with regard to agreement, as observed in Chirag. The effects of these two separate case assignment operations cannot always be distinguished on the surface in many languages due to the very similar syntactic distribution of both and the absence of configurations where only one but not the other is operative. Nepali, where the ergative is characterized as accessible to

agreement in Bobaljik's (2008) terms, could be another example of this type. The close association of structural nominative assigned by T with ergative received from v , and the routinization of nominative-over-ergative case assignment may ultimately lead to the reanalysis of ergative as structural case assigned by T, thus showing an even closer parallelism with nominative-accusative alignment, as in Basque, which has both v -assigned (morphological absolutive) and T-assigned (morphological ergative) structural cases, much like accusative languages (Rezac et al. 2014).

On a final note, one more distant connection can also be established with another strand of research, which suggests that ergative case on a DP can be a result of that DP having established relations with two different functional heads in a clause: v and T. In Nez Perce, ergative case appears in clauses where the transitive subject agrees with both v and T (Deal 2010). Likewise, ergative case assignment in Amahuaca (Tupian) is contingent on the movement of the transitive subject to the specifier of TP, that is, again, it requires involvement of both the v P and TP layers (Clem 2019). While Chirag is apparently different from both in that ergative marking is assigned within v P, requiring no involvement of T in licensing overt ergative morphology, we can notice its deeper similarity with Nez Perce and Amahuaca in that the transitive subject receives the full set of its syntactic properties only after it has established relationships with v and with T.

My analysis of Chirag also differs from Deal's and Clem's approaches in the nature of the relationship I assume between the transitive subject, on the one hand, and clausal functional heads, on the other hand. On Deal's (2010) and Clem's (2019) analyses, the transitive subject first Agrees with the v head, then (moving to Spec,TP for EPP and) agreeing with T. Both analyses assume a postsyntactic account of ergative case, suggesting that ergative marking is a Vocabulary Insertion response to the set of agreement features the transitive subject manages to acquire. The ergative case suffix is reserved exclusively for a DP bearing agreement features of both v and T, while DPs missing at least one of them end up pronounced without morphological ergative case. The analysis developed in this article is couched in terms of case features, thus assuming that they are present in narrow syntax. It remains to be seen whether a common featural and derivational denominator can be found in Chirag, Nez Perce, and Amahuaca, New Indo-Aryan and other morphologically ergative languages or whether some of them present different irreducible parametrizations in the typology of ergativity.

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