

Differential Subject Marking and Person Licensing Condition*

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Punjabi, an Indo-Aryan language, has both aspect and person-based split ergativity; ergative subjects appear only in the perfective, and only 3rd person subjects may bear ergative case. We analyze Punjabi 1st/2nd person subjects in the perfective and present evidence that they are neither ergative nor nominative. These DPs (determiner phrases) carry a [+person] feature that must enter into a valuation relation with a head, obeying Béjar and Rezac's (2003) *Person Licensing Condition*. This head, μ , we assume, lies between vP and TP (Tense Phrase) and values the raised 1st/2nd DPs as oblique. 3rd person DPs remain in situ at vP and are ergative case-valued. The theoretical implication is that differential subject marking is a configurational phenomenon. The relative position of the subjects, determined by their person licensing requirements, is crucial to their differential case marking. We also show that Punjabi differential subject marking is independent of differential object marking.

Key words: person, ergativity, clause structure, differential subject marking, Punjabi

1. Introduction

Ergative alignment in the perfective in Indo Aryan languages is typically manifested by ergative case morphology on the subject coupled with object agreement on the verb. However, languages display a huge amount of variation with respect to the ergative pattern, which has been discussed in detail by Butt & Deo (2001), Deo & Sharma (2006), Bhatt (2007), Grosz & Patel-Grosz (2014) and Udaar (2015, 2016) among others. It has been shown that while some languages (Hindi-Urdu, Nepali) overtly mark their subjects with ergative case, others (Marwari, Kutchi Gujarati) opt for unmarked ones. Furthermore, while most ergative languages (Hindi-Urdu, Marathi) obligatorily suppress verbal agreement with marked ergative subjects, some (Nepali) have full phi-feature agreement. The table from Deo & Sharma (2006) given below sums up this range of variation.¹

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¹ The following abbreviations are used in this article: NOM: nominative case; ERG: ergative case; ACC: accusative case; DAT: dative case; OBL: oblique case; SG: singular; PL: plural; M: masculine gender; F: feminine gender; N: neuter gender; HAB: habitual; PERF: perfective; PROG: progressive; PRES: present tense; SUBJ: subject; OBJ: object.

Table 1. Variation in subject marking and agreement across select Indo-Aryan languages (Deo & Sharma 2006:6)

Language	Ergative marking	Agreement	Agreement features
Hindi	1SG, 2SG, 3SG 1PL, 2PL, 3PL	NOM SUBJ, NOM OBJ (when S is non-NOM)	gender, number
Nepali	1SG, 2SG, 3SG 1PL, 2PL, 3PL	NOM and ERG SUBJ	person, number
Gujarati	1SG, 2SG, 3SG 3PL	NOM SUBJ, NOM and ACC OBJ (when SUBJ is non-NOM)	gender, number
Marathi	3SG, 3PL	NOM SUBJ, NOM OBJ (when SUBJ in non-NOM)	gender, number, person
Bengali	none	NOM SUBJ	person, number

In this paper, we consider Punjabi perfective sentences, where the ergative is allowed only with 3rd person subjects while 1st/2nd person subjects remain unmarked (Bhatia 1993, Butt & Deo 2001, Bhatt 2007),² as exemplified in (1a)-(1c).³

- (1) a. *munde-ne/o-ne* *rottii* *khaaḍḍii*
 boy-ERG/3.SG-ERG bread.F.SG.ACC eat.PERF.F.SG
 ‘The boy/(S)he ate bread.’
- b. *munda/o* *rottii* *khaaṇḍaa/ khaaṇḍii*
 boy.NOM/3.SG.NOM bread.F.SG.ACC eat.HAB.M.SG/eat.HAB.F.SG
e
 be.PRES.3.SG
 ‘The boy/(S)he eats bread.’
- c. *maĩ-(*ne)/ṭuu-(*ne)* *rottii* *khaaḍḍii*
 1.SG-(*ERG)/2.SG-(*ERG) bread.F.SG.ACC eat.PERF.F.SG
 ‘I/you ate bread.’

² The Punjabi data discussed here was collected in different phases between 2012 and 2014 in New Delhi and Kanpur in Uttar Pradesh.

³ Punjabi split ergativity is cursorily discussed in Bhatia (1993), Butt & Deo (2001), Deo & Sharma (2006) and Legate (2014). Details of the variations found in the language are, however, left unaddressed; see Kaur (2015) for a detailed exposition of the case-agreement patterns in the language.

We have organized the paper in the following way. In Section 2, we present the Punjabi DSM facts in some detail. We also discuss the object case and agreement patterns and show that Punjabi DSM effects are not dependent on differential case marking on the object (differential object marking/DOM) and its semantic consequences, unlike what has been shown for Ika and Eastern Ostyac by Baker (2014). In Section 3, we investigate the nature of these differentially marked subjects, using diagnostics from Deo & Sharma (2006) and Legate (2012, 2014), and show that they do not share the properties of nominative or ergative subjects. We then present our analysis in Section 4, showing that the absence of ergative case marking on subjects is linked to their person licensing requirements. In Section 5, we compare Punjabi DSM effects with those found in other Indo-Aryan languages like Hindi-Urdu and Marathi. Section 6 concludes the paper.

2. Detailing Punjabi DSM

As discussed in the previous section, Punjabi manifests a binary ergative split, in aspect and person. This results in 1st/2nd person DPs remaining unmarked in the perfective aspect, as illustrated in (4) and (5). Only 3rd person subjects get ergative marked, as shown in (6).

(4) <i>maĩ/asii</i>	<i>kuRii</i>	<i>vekhii</i>	<i>e</i>
1.SG/1.PL	girl.F.SG.ACC	see.PERF.F.SG	be.PRES.3.SG
‘I/we have seen a girl.’			
(5) <i>ṭuu/ṭussii</i>	<i>kuRii</i>	<i>vekhii</i>	<i>e</i>
2.SG/2.PL	girl.F.SG.ACC	see.PERF.F.SG	be.PRES.3.SG
‘You/you (pl.) have seen a girl.’			
(6) <i>o-ne/ona-ne</i>	<i>kuRii</i>	<i>vekhii</i>	<i>e</i>
3.SG-ERG/3.PL-ERG	girl.F.SG.ACC	see.PERF.F.SG	be.PRES.3.SG
‘S(he)/they has/ have seen a girl.’			

In (4) and (5), the 1st/2nd person DPs, whether singular or plural, are unmarked and fail to trigger agreement with the verbal-auxiliary complex, which instead agrees with the unmarked object *kuRii* ‘girl’ in number and gender. In (6), on the other hand, the 3rd person DPs are marked with an overt ergative morpheme, with the verbal-auxiliary complex agreeing with the unmarked object. However, when the object is marked with an overt *-nuu* morpheme as in (7), the verbal complex carries obligatory default

(3rd person masculine singular) agreement. Marked objects are interpreted as specific, while unmarked ones are always non-specific.⁴

- (7) *māī/ tuu/o-ne* *kuRii-nuu* *vekhyaa* *e*
 1.SG/2.SG/3.SG-ERG girl.F.SG-ACC see.PERF.M.SG be.PRES.3.SG
 ‘I/you/S(he) have/has seen the girl.’

Importantly, differential case marking on the object, i.e., whether it is marked with an overt accusative case or an unmarked accusative, and the resultant object-verb agreement or the absence of it do not affect the differential case marking on the subject in Punjabi. All 1st/2nd/3rd person subjects retain their respective cases, irrespective of the case morphology on the object and the presence/absence of object agreement on the verb, as also attested to by the same set of examples in (4)-(7). This is different from DSM effects in Eastern Ostyac and Ika reported in Baker (2014), which positively correlate with DOM effects. Some relevant examples from Eastern Ostyac are given below.

- (8) *mə-ŋən* *ləŋə₁* *əllə* *juj* *kanŋa* *t₁* *aməŋaloŋ*
 we-ERG them large trees beside put.PAST.3PL.OBJ/1.PL.SUBJ
 ‘We put them (pots of berries) beside a big tree.’
- (9) *mā* *t’əkājəyläm_{nä}* *ula* *mənyäləm*
 we.DUAL (NOM) youngster.sister.COM berry pick.PAST.1.PL.SUBJ
 ‘We went to pick berries with my younger sister.’ (Gulya 1966, via Baker 2014)

In (8), a marked, specific and adjacent pronominal object co-occurs with an ergative subject. In (9), on the other hand, an unmarked, non-specific, non-adjacent nominal object bleeds the ergative marking on the subject. The subject instead shows up with a nominative value.⁵ Eastern Ostyac and Ika, therefore, seem to correlate DSM and DOM phenomena (see Coon and Preminger (2013) for some problems with such a link). In Punjabi, on the other hand, *prima facie* evidence points to a disconnect between the two: the case marking of the subject remains largely unaffected by the case morphology on the object. Punjabi DSM effects, therefore, seem to emerge from

⁴ Apart from specificity, factors such as definiteness and animacy also determine differential object marking in the language. While animate objects always allow an optional *-nuu*, inanimate objects cannot be marked with a *-nuu* unless they are modified by an overt demonstrative. We leave these intricate patterns of differential object marking in the language for future research.

⁵ Examples (8) and (9) taken from Baker (2014) are not minimal pairs, and in the absence of further evidence, we assume that Eastern Ostyac restricts DOM effects to pronominals.

independent syntactic phenomena. We argue here that DSM in Punjabi is instead tied to person licensing requirements of the 1st/2nd person DP subjects in the perfective.

3. Nature of the unmarked DPs

Before proceeding to our analysis of DSM in Punjabi, we investigate the syntactic nature of the differentially marked 1st/2nd person DPs in this section. In more precise terms, we examine whether these unmarked subjects in the perfective are underlying ergative (but morphologically null), as has been claimed by Deo & Sharma (2006) and Legate (2014),⁶ or whether they are valued nominative by T head, as has been suggested by Coon & Preminger (2012) and Alexiadou & Anagnostopoulou (2006).

Deo & Sharma (2006) and Legate (2014) in their respective works study a wide range of unrelated person-based split ergative languages and claim that unmarked 1st/2nd person subjects in these languages are valued ergative in syntax, based on the following two diagnostics: case agreement and coordination. Marathi, one of the languages that both works look at, for instance, has unmarked 1st/2nd person DPs that satisfy these tests. This is illustrated in the following examples (10) and (11).

- (10) *mi becaari-ne sagla kaam ke-la*
 1.SG poor-ERG all work do-PERF.3.SG
 ‘Poor little me did all the work.’
- (11) *liki-ne ani mi keli kha-ll-i*
 Liki-ERG and 1.SG banana.N.PL.NOM eat-PERF-N.PL
 ‘Liki and I ate bananas.’ (Legate 2014)

As shown in (10), the unmarked 1st person subject in Marathi can be modified using an adjective with ergative morphology, indicating that the unmarked DP has been valued as ergative. Example (11), in which the unmarked 1st person DP conjoins with an ergative marked 3rd person DP, further confirms the underlying ergative nature of the former. We extend the same tests, namely adjectival modification and coordination, to verify if the unmarked 1st and 2nd person subjects in Punjabi are also underlying ergative like those in Marathi. We begin with the adjectival modification test as exemplified in (12) and (13).⁷

⁶ Merchant (2006) claims that the 1st/2nd person arguments in person based ergative languages are first marked ergative within the vP. They are again case valued as nominative when they raise to the T head. This second case value gets realized morphologically.

⁷ The validity of this test in Punjabi is also evidenced by the pattern of adjectives that modify intransitive subjects in the perfective. Thus, let us consider unaccusative subjects, which are always (unmarked) nominative case valued irrespective of their person specification. The adjective that

- (12) *maĩ/ṭuu* *vecaare/*vecaare-ne* *kii* *kar* *ḍiṭṭaa*
 1.SG/2.SG poor.M.SG.OBL/* poor.M.SG-ERG what do give.PERF.M.SG
 ‘What have I/you, poor thing, done?’
- (13) *raam* *vecaare-ne/*vecaare* *kii* *kar* *ḍiṭṭaa* ⁸
 Ram poor.M.SG-ERG/*poor.M.SG.OBL what do give.PERF.M.SG
 ‘What has poor Ram done?’

Unlike Marathi, the adjective that modifies the 1st/2nd person DP in (12) does not manifest ergative morphology, thereby suggesting that 1st/2nd person subjects in Punjabi are not underlyingly ergative.⁹ An adjective that modifies a 3rd person subject, however, is obligatorily—*ne* marked, as shown in (13). With respect to the second test—coordination, the unmarked 1st/2nd person subjects fail to conjoin with ergative marked 3rd person subjects, in either order, as shown in (14) and (15), further substantiating the non-ergative nature of unmarked 1st/2nd person DPs in the language.

modifies these subjects occurs in its unmarked form; an oblique adjective is ungrammatical in such structures (i).

- (i) *maĩ/ṭuu/o* *vecaaraa/vecaarii/*vecaare* *diggeyaa/diggii*
 1.SG.NOM/2.SG.NOM/3.SG.NOM poor.M.SG/poor.F.SG/*poor.M.SG.OBL fall.PERF.M.SG/fall.PERF.F.SG
 ‘Poor I/you/(s)he fell.’

As for unergatives, their 1st/2nd subjects are nominative. Consequently, they too are modified by an unmarked adjective, as in (ii). 3rd person unergative subjects, however, alternate between ergative and nominative case, resulting in alternation in the form of the modifier, as in (iii).

- (ii) *maĩ/ṭuu* *vecaaraa/*vecaare* *niccheyaa*
 1.SG.NOM/2.SG.NOM poor.M.SG/*poor.M.SG.OBL sneeze.PERF.M.SG
 ‘Poor I/you sneezed.’
- (iii) *o/o-ne* *vecaaraa/vecaare-ne* *niccheyaa*
 3.SG.NOM(M)/3.SG-ERG poor.M.SG/poor.M.SG-ERG sneeze.PERF.M.SG
 ‘Poor he sneezed.’

⁸ While we can change the order of the adjective *vecaare* with ergative 3rd person DPs, a pre-nominal adjective with unmarked 1st/2nd subjects must obligatorily be unmarked.

⁹ There is an additional adjectival modifier form *vecaaraa/vecaarii* that can occur with unmarked (masculine and feminine) 1st/2nd subjects in the perfective, as shown in the following example.

- (i) *maĩ/ṭuu* *vecaaraa/vecaarii* *kii* *kar* *ḍiṭṭaa*
 1.SG/2.SG poor.M.SG/poor.F.SG what do give.PERF.M.SG
 ‘What have I/you, poor thing, done?’

These adjectival forms modify both unmarked nominative subjects in the imperfective as in (ii) as well as non-nominative (dative) subjects, as shown in (iii). Since they occur with not just the nominative but also the non-nominative arguments, we consider the said adjectival forms to be default forms, whose presence does not prove the underlying nominative status of the modified argument.

- (ii) *maĩ* *vecaarii* *bajaar* *jaa* *rayĩ* *ãã*
 1.SG.NOM(F) poor.F.SG market go PROG.F.SG be.1.SG
 ‘I, poor thing, am going to the market.’
- (iii) *maĩ-nuu* *vecaarii-nuu* *bhukhh* *lagii* *e*
 1.SG(F)-DAT poor.F.SG-DAT hunger feel.F be.PRES.3.SG
 ‘I, poor thing, am feeling hungry.’

- (14) **maĩ/ṭuu* *ṭe* *raam-ne* *rottii* *khaaddii*
 1.SG/2.SG and ram-ERG bread.F.SG.ACC eat.PERF.F.SG
 ‘I/you and Ram ate bread.’
- (15) **raam-ne* *ṭe* *maĩ/ṭuu* *rottii* *khaaddii*
 ram-ERG and 1.SG/2.SG bread.F.SG.ACC eat.PERF.F.SG
 ‘Ram and I/you ate bread.’

It must be noted that Punjabi allows coordination between a lexical noun and a pronominal.¹⁰ However, the conjuncts must be identically case marked, as shown in the grammatical structure in (16), where the proper noun *raam* conjoins with the 3rd person pronoun.

- (16) *raam-ne* *ṭe* *o-ne* *rottii* *khaaddii*
 ram-ERG and 3.SG-ERG bread.F.SG.ACC eat.PERF.F.SG
 ‘Ram and (s)he ate bread.’

Similarly, it is also possible to coordinate a 1st/2nd person pronoun with a lexical noun when both bear the same case, as exemplified in (17).

¹⁰ Apart from the coordination between a lexical noun and a 3rd person pronoun as shown in (16), the language also permits coordination between two 3rd person pronouns and two lexical nouns, as in (i) and (ii) respectively.

- (i) *o* *ṭe* *o* *bajaar* *gaye*
 3.SG.NOM and 3.SG.NOM market go.PERF.M.PL
 ‘He and he went to the market.’

- (ii) *raam* *ṭe* *sitaa* *bajaar* *gaye*
 Ram and Sita market go.PERF.M.PL
 ‘Ram and Sita went to the market.’

Additionally, it is possible to conjoin 1st and 2nd person pronouns in either order, as in (iii) and (iv). Their plural counterparts also behave similarly.

- (iii) *ṭuu* *ṭe* *maĩ* *bajaar* *gaye* *sãã*
 2.SG.NOM and 1.SG.NOM market go.PERF.M.PL be.PAST.1
 ‘You and I had gone to the market.’

- (iv) *maĩ* *ṭe* *ṭuu* *bajaar* *gaye* *sãã*
 1.SG.NOM and 2.SG.NOM market go.PERF.M.PL be.PAST.1
 ‘You and I had gone to the market.’

The language also permits conjunction between a 1st and 2nd pronoun when they differ in their number specification. This is illustrated in (v) and (vi).

- (v) *ṭusii* *ṭe* *maĩ* *bajaar* *gaye* *sãã*
 2.PL.NOM and 1.SG.NOM market go.PERF.M.PL be.PAST.1
 ‘You (pl) and I had gone to the market.’

- (vi) *asii* *ṭe* *ṭuu* *bajaar* *gaye* *sãã*
 1.PL.NOM and 2.SG.NOM market go.PERF.M.PL be.PAST.1
 ‘We and you had gone to the market.’

- (17) raam *ṭe* *maĩ* *bajaar* *gaye* *sãã*
 Ram.NOM and 1.SG.NOM market go.PERF.M.PL be.PAST.1
 ‘Ram and I had gone to the market.’

Since conjunction between a 1st/2nd person pronoun and a lexical noun is possible when they bear the same case, we take the ban on their coordination in (14) and (15) to suggest distinct case values on the two conjuncts.

The evidence discussed so far, therefore, points to a clear difference between person-split languages like Marathi and Punjabi—unlike the former, the latter does not have underlying ergative (but morphologically null) 1st/2nd person subjects.

Having established that unmarked 1st/2nd person DPs in Punjabi are not ergative, we now move on to explore whether they are nominative (unmarked) valued by the T head. Coon & Preminger (2012) uphold such a position in their work on person-based DSM effects in languages such as Dyirbal and Kham. Their account, based on the *Person Licensing Condition* of Béjar & Rezac (2003), argues for a ParticipantP above the VP to license 1st/2nd person pronouns, as shown in (18). The Person Licensing Condition is as stated in (19).

- (18)

[_{VP} DP1-NOM/abs]

[_{PartP} [_{VP} DP2-NOM/abs]]]

 Case domain 1 Case domain 2

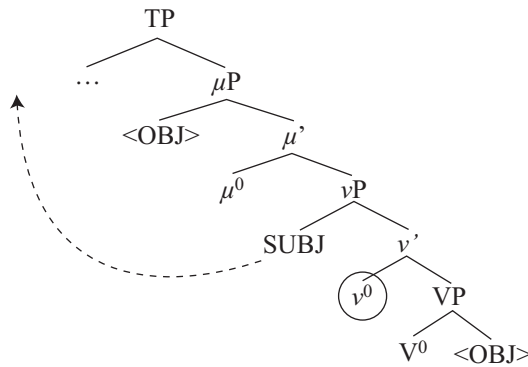
- (19) *An interpretable 1st/2nd person feature must be licensed by entering into an Agree relation with a functional category.* (Béjar & Rezac 2003:53)

In (18), the ParticipantP bifurcates the “clause” creating two clauses/case domains, such that both nominals (1st/2nd person DP and the object DP) get nominative/absolutive case valued in their respective domains. On the other hand, there is no ParticipantP in clauses with a 3rd person subject, which consequently ends up in the same case domain as the object DP and gets a dependent ergative case.

In their more recent work, instead of positing a separate head (Participant) for licensing 1st/2nd person features in person-based split ergative languages, Coon & Preminger (2013) claim that v can license the [person] features of the 1st/2nd person subjects when they are first merged in the specifier of vP. Additionally, the phasehood of v is parameterized. In languages with a phasal v, the 1st/2nd person subject is licensed in spec, vP and the complement of vP is spelled out, taking the direct object along with it. This prevents the subject from receiving a dependent ergative case. This

is illustrated in (20), where the subject gets either a nominative from the T head or remains case-less.¹¹

(20)



Coon & Preminger’s work (2012) does not explicitly mention the problem of the ergative case marking mechanism on 3rd person subjects. We assume that the *v* hosting a 3rd person pronominal in its specifier is personless and, therefore, a non-phase. Hence, the 3rd person subject ends up receiving a dependent ergative by virtue of being in the same phase as the structural case valued object.

The parameterization of verbal heads leading to differential subject marking is central to not only Coon & Preminger’s analysis, but also to the proposal made by Alexiadou & Anagnostopoulou (2006) for the Coast Salish language Lummi. Alexiadou & Anagnostopoulou suggest the presence of two different verbal heads—a minus person *v*_ERG and a *v*_ACC which is plus person. The first head has an ergative case assigned to a 3rd person pronominal subject, which is also personless. In the second instance, the *v*_ACC gives its case to the object, thus forcing the plus person subject to seek a nominative case from the higher T head.

Side-stepping some technical drawbacks of these analyses, we now turn our attention to the question of whether Punjabi unmarked subjects in the perfective are underlying nominative just like their counterparts in Dyrirbal, Kham and Lummi. We show below that they are not, using the following diagnostics: 1) lack of agreement with T head, and 2) the presence of oblique inflection on the adjective.

To begin with, we provide the example in (21), with the unmarked 1st/2nd person DPs in the perfective, which do not trigger agreement on the verb-auxiliary complex. Instead, agreement is triggered by the object in number and gender (see Mahajan

¹¹ Omer Preminger (personal communication) suggests that the external argument could be a case-less DP as well (see also Kornfilt & Preminger (2013)).

1990, Davison 2004, Bhatt 2005, Legate 2008 for a similar proposal for object agreement in Hindi-Urdu).

- (21) *maĩ/ṭuu rottii khaaḍḍii e*
 1.SG/2.SG bread.F.SG.ACC eat.PERF.F.SG be.PRES.3.SG
 ‘I/You ate bread.’

These patterns are very different from those found with nominative subjects in the imperfective, as illustrated by the example in (22). Nominative subjects in the imperfective domain, notwithstanding their person feature specification, trigger agreement on the verbal complex in person, number and gender.

- (22) *maĩ/ṭuu rottii khaanḍaã aã/ẽ*
 1.SG.NOM/2.SG.NOM bread.F.SG.ACC eat.HAB.M.SG be.PRES.1.SG/2.SG
 ‘I/you eat bread (habitually).’

Furthermore, as shown in (23), a 1st/2nd person DP in the perfective can be modified with an oblique form, contra the nominative 1st/2nd person DPs in the imperfective, which can be modified only with the unmarked adjective, as exemplified in (24).

- (23) *maĩ/ṭuu vecaare kii kar ḍittaa*
 1.SG/2.SG poor.M.SG.OBL what do give.PERF.M.SG
 ‘What have I/you, poor thing, done?’

- (24) *maĩ/ṭuu vecaaraa/*vecaare/*vecaare-ne kii kar reyaa*
 1.SG/2.SG poor.M.SG./*OBL./*ERG what do stay.PROG.M.SG
aã/ẽ
 be.PRES.1.SG/2.SG
 ‘What am I/you, poor thing, doing?’

In summary, we have made two observations regarding the unmarked 1st/2nd person DPs in the perfective in Punjabi: 1) they are not underlying ergative; and 2) they are not nominative. Evidence provided here also points towards the presence of an oblique case on such DPs, as has been claimed by Chandra & Kaur (2014) and Kaur (2015). In the following section, we show how these DPs license their person feature and consequently receive an oblique case value.

4. Analysis

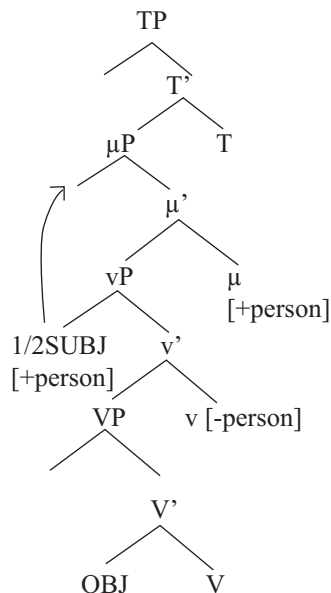
In this section, we provide an analysis of DSM effects in Punjabi. As discussed previously, unmarked 1st/2nd person subject DPs in this language are neither nominative nor ergative, indicating their dissociation from T and v, which are the nominative and ergative case licensers, respectively. We claim that the DSM effects on the 1st/2nd person DPs are a consequence of their syntactic position, which is determined by their person licensing requirement. To this end, we propose a tripartite structure given in (25) for the perfective in Punjabi, with three case valuing heads, v, μ and T, such that v assigns ergative, μ assigns oblique and T assigns nominative case.

(25) [TP [μ P[_vP SUBJ [_vP OBJ V]]]]

We argue that unmarked 1st/2nd person DPs, which are first merged in spec, vP, raise to the specifier of μ P to license their person features and subsequently get oblique case valued. Let us begin with the structure in (26) first, with the representation given in (27).

(26) *maĩ/ṭuu* *kuRii* *vekhii*
 1.SG/2.SG girl.F.SG.ACC see.PERF.F.SG
 ‘I/You saw a girl.’

(27)



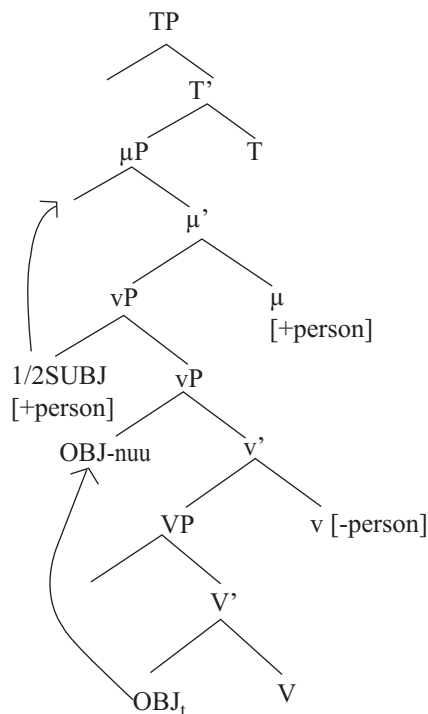
Our contention is that perfective v in Punjabi is a personless head. The object is generated in the complement of VP and enters into Agree with v and receives a

structural (unmarked) accusative case value, with *v* showing the number and gender values of the object. As for the subject, we base-generate it in the specifier of *vP* where it gets a theta role from the *v*. The subject is plus person, and hence there is no possibility of it receiving a case value from *v* due to a feature mismatch. Instead, the DP raises to the specifier of the higher head μ , bearing a plus person feature. The person feature of the subject is licensed in this position, and it also receives an oblique case. While the details of the oblique case mechanism need to be worked out, we would like to suggest here that the unmarked oblique for Punjabi perfective subjects comes from a postpositional feature [+P] located on μ . Kidwai (2010) working with the Hindi accusative/dative case marker *-ko* demonstrates that morphological cases in South Asian languages are postpositional markers located on functional heads. Extending her idea to Punjabi oblique, we posit a [+P] feature at μ that allows the head to oblique case-value the raised 1st/2nd person subject in its specifier.

We next turn to the sentence in (28) with an unmarked 1st/2nd person subject and a marked object, with the representation in (29).

- (28) *maĩ/ṭuu* *kuRii-nuu* *vekhyaa*
 1.SG/2.SG girl.F.SG-ACC see.PERF.M.SG
 ‘I/You saw the girl.’

(29)



In (29), the derivation of 1st/2nd person subjects remains the same as in (27). The said subjects raise to the edge of μ P, where they license their person feature and receive an oblique case. As for the object, we claim that the marked object does not get licensed in its base-generated position in the complement of VP. Instead, it raises to the inner specifier of vP and gets case-marked, realized as *-nuu*. In so far as Kidwai (2010) is correct, the marked “accusative” case on the object can be understood as a [+postposition] related “oblique” case located at the v level.

The difference between an unmarked accusative object and a marked accusative object can be noticed in their binding relations, as has also been shown for Hindi-Urdu by Kidwai (1995, 2000, 2010). Consider the examples below, where the unmarked object fails to bind the PP-embedded possessive pronominal in (30) while the marked object binds into it, as exemplified in (31).

(30) *karan-ne_i cuuaa_j odde^{*i/*j/k} bag vicc rakheyaa*
 karan-ERG rat.M.SG.ACC his bag in keep.PERF.M.SG
 ‘Karan kept the rat in his (someone else’s) bag.’

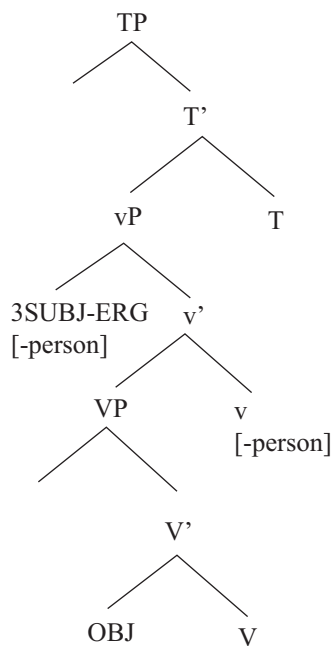
(31) *karan-ne_i cuue-nuu_j odde^{*i/j/k} bag vicc rakheyaa*
 karan-ERG rat.M.SG-ACC his bag in keep.PERF.M.SG
 ‘Karan kept the rat in his (rat’s or someone else’s) bag.’

This indicates that the marked object is in a higher position than the unmarked one. Specifically, we claim that while the unmarked object is case-licensed in its base-generated position, the marked accusative is obtained on the moved object in spec, vP.

Moving on to constructions with 3rd person ergative subjects as illustrated in example (32), we posit the representation in (33).

(32) *o-ne kuRii vekhii*
 3.SG-ERG girl.F.SG.ACC see.PERF.F.SG
 ‘(S)he saw the girl.’

(33)



In (33), the personless 3rd person subject receives an ergative case at the edge of vP. There are two possible approaches to the ergative case assignment on the 3rd person subject. According to the first analysis, the ergative is a theta related inherent case valued on the subject in the specifier of vP (in keeping with Legate 2008, 2012). However, analyzing the ergative as inherent prevents an explanation for the lack of an ergative value on 1st/2nd person subjects. To elaborate, assuming that the ergative is an inherent case would entail that the 1st/2nd person subjects receive an ergative in their base-generated position, after which they raise to the person bearing μ P to license their person features. However, as we have seen in the previous section, there is no evidence to support the underlying ergative nature of 1st/2nd person perfective subjects in the language. We thereby cannot adopt the account of ergative as an inherent case.

Alternatively, extending Kidwai's (2010) observations about the nature of the morphological case in Hindi-Urdu, we assume that the ergative in Punjabi is a postpositional case, which is valued on a 3rd person subject by a [+P] feature located at the v. Some evidence for the ergative being a P-related case at the v level comes from case syncretism in related Western Indo-Aryan languages (see Baker & Atlamaz 2014 for a similar proposal of oblique DPs for Kurmanji). Udaar (2016) shows that Haryanavi and Mewari have identical morphemes for ergative, accusative and dative cases. Some relevant examples from these languages follow.

(34) Haryanavi

a. *jon-ne cor dekhyā*
 John-ERG thief see.M.SG.PERF
 ‘John saw a thief.’

b. *jon meri-ne bəlavε tʰa*
 John.NOM Mary-ACC call.PROG be.M.SG.PRES
 ‘John was calling Mary.’

c. *jon meri-ne sʰer dikʰavε tʰa*
 John.NOM Mary-DAT lion.ACC show.PROG be.M.SG.PRES
 ‘John was showing a lion to Mary.’ (Udaar 2016:147)

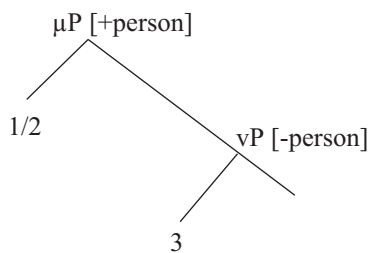
(35) Mewari

a. *jon-ne meri-ne bulayo*
 John-ERG Mary-ACC call.DEF.PERF
 ‘John called Mary.’

b. *jon-ne meri-ne naher dikʰayo*
 John-ERG Mary-DAT lion.ACC show.DEF.PERF
 ‘John showed a lion to Mary.’ (Udaar 2016:148)

To sum up, we have the structure shown in (36) for the perfective transitive clause in Punjabi.

(36)



As shown, the transitive perfective clause in the language has two case-licensing positions- μ and v . 1st/2nd person subjects, by virtue of bearing a [+person] feature cannot be licensed in situ, and are consequently oblique case-valued in the specifier of μ P. 3rd person subjects, in contrast, get a P related ergative at the specifier of v P. As for objects, they can either be structurally valued as (unmarked) accusative in situ or they can obtain a P-related (marked) “accusative” at the v P level. While the unmarked oblique valued on the 1st/2nd person subjects, the ergative valued on the 3rd person subject and the marked accusative on the object are all P-related cases, they are all

associated with different structural positions, resulting in different morphological forms for each.

5. Cross-linguistic implications for DSM effects

If the analysis proposed here for Punjabi DSM is right, differential subject marking or the lack thereof in typologically related languages like Marathi and Hindi-Urdu can also be explained by the person licensing requirements on the subject DPs and the nature of the person licensing heads in these languages.

As is well known, a number of Indo-Aryan languages exhibit ergativity in the perfective aspect, with a lot of cross-linguistic variations. Hindi-Urdu, a well-studied language (Mahajan 1989, 1997, 2012, Davison 2004, Bhatt 2007, Subbarao 2012 among others) is an aspect-based split ergative language, without any person split. This is illustrated in (37) and (38).

- (37) *maĩ/tuu/vo* *rotii* *khaaṭaa*
 1.SG.NOM/2.SG.NOM/3.SG.NOM(M) bread.F.SG eat.HAB.M.SG
huĩ/hai/hai
 be.PRES.1.SG/2.SG/3.SG
 ‘I/you/he eat(s) bread.’
- (38) *maĩ-ne/tuu-ne/us-ne* *rotii* *khaayii* *hai*
 1.SG-ERG/2.SG-ERG/3.SG-ERG(M) bread.F.SG eat.PERF.F.SG be.PRES.3.SG
 ‘I/you/he have/has eaten bread.’

As shown in (37), all subjects are nominative and trigger agreement on the verbal complex in the imperfective. In the perfective, all subjects, irrespective of their person specifications are ergative *-ne* marked and do not control verbal agreement, which is instead triggered by the unmarked object (38). In so far as our analysis is correct, the absence of DSM effects in Hindi-Urdu must lie in the choice this language makes with regard to the person licensing head. We claim that Hindi-Urdu, unlike Punjabi, lacks a μ P bearing a [+person] feature (39).

- (39) [TP [_{VP} 1/2/3SUBJ [_{VP} OBJ V]]]

As seen in (39), there is no μ P in the perfective in Hindi-Urdu. Instead, the *v* can carry an extra [+person] feature to license the appropriate feature on 1st/2nd person subject DPs. Consequently, all subjects (1st/2nd and 3rd person) get a P-related ergative

in their base generated position, i.e., the specifier of vP. However, the direct object in Hindi-Urdu behaves like its Punjabi counterpart. It can stay in situ and obtain an unmarked accusative via Agree with the v. Alternatively, it can raise to the edge of vP and receive an accusative/oblique marker, realized as *-ko* (in keeping with Kidwai 2010).

Marathi poses further challenges. This language resembles Punjabi in being both an aspect and person-based split ergative language. However, unlike Punjabi, the unmarked 1st/2nd person subjects in Marathi are underlying ergative as has been illustrated by Deo & Sharma (2006) and Legate (2014). Examples are given below showing differential subject marking on the 1st/2nd and 3rd person DPs.

- (40) *mii/tuu/tya-ne* *ek* *chimnii* *baghit-ii*
 1.M/2.M/3.M-ERG one sparrow.F.NOM see-PERF.F.SG
 ‘I/you/he saw a sparrow.’
- (41) *mii/tuu/tii-ne* *ek* *ambaa* *khaa-llaa*
 1.F/2.F/3.F-ERG one mango.M.NOM eat-PERF.M.SG
 ‘I/you/she ate a mango.’ (Adapted from Deo & Sharma 2006)

Assuming that 1st/2nd person subjects in Marathi are syntactically on a par with marked 3rd person subjects, we posit a clause structure without the μ P for Marathi. Like in Hindi-Urdu, the v has an extra [+person] feature to license 1st/2nd person subjects. The v head therefore values the ergative case to all subjects (1st/2nd/3rd person). The lack of ergative morphology on 1st/2nd person DPs in the language must, therefore, be a post-syntactic phenomenon, with no bearing on the narrow syntax. A possible explanation is provided by Legate (2014), who claims that the 1st/2nd person DPs do not show ergative case marking due to an impoverishment rule in Distributed Morphology, which applies in the morphological component and deletes the ergative case marking on a DP in the presence of its marked 1st/2nd person features. We largely follow Legate in this analysis for Marathi DSM effects.

A meso-comparison between Punjabi, Hindi-Urdu and Marathi, therefore, gives the following picture: languages of the western Indo-Aryan family may differ on the presence/absence of a person feature on v. While v in Punjabi cannot host a person feature, leading to a μ P projection for licensing 1st/2nd person subjects, Hindi-Urdu and Marathi have a v that bears an extra person feature for the same. The last two languages are further divided based on morpho-phonological rules at the interface. Marathi, but not Hindi-Urdu, has an extra impoverishment rule that deletes the ergative marking on 1st/2nd perfective subjects. From this, we contend that both narrow syntactic computations and interface rules are responsible for cross-linguistic

variation in DSM effects in western Indo-Aryan languages. While DSM effects arise in narrow syntax in some languages, they are a consequence of post-syntactic rules like the ones posited in Distributed Morphology in others.

6. Conclusion

To conclude, we have shown that DSM in Punjabi is a syntactic phenomenon caused by the person licensing requirement of 1st/2nd person DPs. To this end, we have provided a clause structure based analysis wherein 1st/2nd person DPs in the language obligatorily raise out of the vP to value their [+person] feature against a higher head, μ . Furthermore, we have argued that DSM effects in Punjabi are not determined by differential case marking or interpretation of the object. Thus, irrespective of whether the object is marked or unmarked and gets interpreted as specific or non-specific, the 1st/2nd person subject DPs are oblique and the 3rd person subject DPs are ergative in the perfective domain.

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本文分析旁遮普語 (Punjabi) 完成貌中的第一及第二人稱主語。此種印度雅利安語同時擁有時貌和人稱為基礎的部分作格性 (split ergativity)，其作格主語只在完成貌中出現，且僅有第三人稱的主語可以帶有作格格位。我們呈現證據顯示無標記的第一及第二人稱主語在完成貌中既非作格亦非主格。根據 Béjar 和 Rezac's (2003) 的人稱認可條件 (Person Licensing Condition)，帶有人稱特徵的限定詞組，該人稱特徵必須和中心語做呼應 (Agree)。本文假定中心語 μ 介於 vP 和 TP 之間，並將移位之第一和第二人稱限定詞組標值為斜格，第三人稱的限定詞組則會留在原地並得到作格。由本文我們可推論至更深入之理論觀點：異相主語標記是結構性的現象。由人稱認可條件所決定的主語相對位置對於異相格位標記頗具重要性，而旁遮普語之異相主語標記和異相賓語標記是彼此獨立、互相不受影響的。

關鍵詞：人稱、作格、子句結構、異相主語標記、旁遮普語