

# The syntax of split: The case of Hindi and Magahi<sup>1</sup>

DEEPAK ALOK, *Rutgers University*

## ABSTRACT

This paper provides a theoretical explanation of split construction in Hindi and Magahi, both SOV, modern Indo-Aryan languages. In both languages, all the pronominal elements can be fronted independent of the object NP. However, these elements cannot be split off from overtly Case marked object in Hindi. Magahi, on the other hand, allows split even from the Case marked objects. Furthermore, Magahi allows split from all kind of subject whereas Hindi only allows split from Dative and Instrumental subject and the subject of Unaccusative and Unergative, but not from the subject of transitive clauses. This paper provides a unified account to derive this asymmetry by adopting the theory of “freezing” effects: Once a constituent moves it becomes opaque for extraction (Wexler and Culicover 1980, Takahashi 1994, Stepanov 2007).

## 1 Introduction

This paper aims to provide a theoretical explanation of split construction in Hindi and Magahi, both SOV modern Indo-Aryan languages. The term “split” here refers to ‘discontinuity of a phrase’ (van Riemsdijk Henk 1989, Fanselow and Čavar 2002, Fanselow and Féry 2006). For example, (1) shows the canonical order of Magahi and Hindi noun phrase where a pronominal element adjective ‘good’ and a noun ‘book’ are string adjacent. (2) shows the split construction where the subject intervenes between the adjective and the noun<sup>2</sup>.

- |         |                |                              |                |             |        |
|---------|----------------|------------------------------|----------------|-------------|--------|
| (1) (a) | ham            | <b>barhiāā</b>               | <b>kitaab</b>  | kharid-lii. |        |
|         | I[NOM]         | good                         | book           | buy-PF.1    |        |
|         |                | ‘I bought (a) good book(s).’ |                |             | Magahi |
| (b)     | māĩ=ne         | <b>achii</b>                 | <b>kitaabē</b> | kharid-īi.  |        |
|         | I=ERG          | good.F                       | book.F.PL      | buy-PF.F.PL |        |
|         |                | ‘I bought good books’        |                |             | Hindi  |
| (2) (a) | <b>barhiāā</b> | ham                          | <b>kitaab</b>  | kharid-lii. |        |
|         | good           | I[NOM]                       | book           | buy-PF.1    |        |
|         |                | ‘I bought good books’        |                |             | Magahi |
| (b)     | <b>achii</b>   | māĩ=ne                       | <b>kitaabē</b> | kharid-īi   |        |
|         | good.F         | I=ERG                        | book.F.PL      | buy-PF.F.PL |        |
|         |                | ‘I bought (a) good book(s)’  |                |             | Hindi  |

Particularly, the paper investigates the syntactic property of split from subjects and direct objects. There is an asymmetry regarding the possibility and impossibility of splitting from an object and a subject in Hindi and Magahi. This paper provides a unified account to derive this asymmetry by adopting and developing the theory of “freezing” effects: Once a constituent moves it becomes opaque for extraction (Wexler and Culicover 1980, Takahashi 1994, Stepanov 2007 and many others).

This paper is structured as follow: Section (2) presents the empirical facts of Hindi and Magahi. Section (3) presents the core assumptions and proposals that I adopt to give an account for Hindi

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<sup>1</sup>The Hindi variety taken for this study is spoken in and around Delhi and the Magahi variety is spoken in and around Jehanabad and Gaya in Bihar in India.

<sup>2</sup>The split off element and the source are shown in bold face in this paper. The split off element could be topic or focus in Hindi and Magahi

and Magahi data. The first part of this section presents the three fundamental assumptions: Chain Uniformity condition, Shortest Move and the cycle principle. The second part shows how these assumptions give an account of the Hindi and Magahi facts. Section (4) concludes the paper.

## 2 Data Presentation

Both Magahi and Hindi have differential object marking (DOM) (Comrie 1989, Mohanan 1993, Singh 1994, Aissen 2003, Bhatt and Anagnostopoulou 1996, Bhatt 2007, Self 2012 and many others for Hindi). The unspecific direct objects are unmarked (henceforth unmarked object) while the specific direct objects (henceforth marked object, glossed as a DOM) are marked with overt case (Bhatt and Anagnostopoulou 1996, Bhatt 2007, Self 2012). Splitting is allowed from unmarked object in both languages as shown in (3). Although, in (3), the adjective and numeral are split off from the rest of the noun phrase, the facts are the same with other kinds of modifiers too. The whole range of prenominal elements can be fronted away from the object NP<sup>3</sup>.

- (3) (a) **caar** māĩ=ne **kele** khaa-ye  
four I=ERG banana.M.PL eat-PF.M.PL  
'I ate four bananas.' Hindi
- (b) **lambaa** māĩ=ne **laRkaa** dekh-aa  
tall I.ERG boy see-PF.M.SG  
'I saw a tall boy.' Hindi
- (c) **caar-go** ham **kelaa** khai-lii  
four-CLF I[NOM] banana eat-PF.1  
'I ate four bananas.' Magahi
- (d) **lambaa** ham **laikaa** dekh-lii  
tall I[NOM] boy saw-PF.1  
'I saw a tall boy.' Magahi

However, these prenominal elements cannot be extracted out of Hindi marked objects, as in (4).

- (4) (a) \***caar** māĩ=ne **laRkō=ko** dekh-aa.  
four I=ERG boyM.OBL.PL-DOM see.PF.M.SG  
'I saw four specific boys.'
- (b) \***lambe** māĩ=ne **aadmi=ko** dekh-aa.  
tall.OBL I=ERG man[M].SG-DOM see.PF.M.SG  
'I saw the tall man.'

Magahi, on the other hand, allows the extraction of a modifier from the marked objects as shown in (5).

- (5) (a) **tiin-go** ham **aadmi=ke** dekh-lii.  
three-CLF I[NOM] man-DOM see-PF.1  
'I saw three specific men.'
- (b) **lambaa** ham **aadmii=ke** dekh-lii.  
tall I[NOM] man-DOM see-PF.1  
'I saw the tall man.'

Consider now subjects. Magahi allows split from subject of transitive clauses. In (6), the numeral 'three' appears on the left periphery of the sentence and it is ambiguous. In one interpretation, numeral 'three' modifies the subject 'boys' and in the second interpretation, it modifies the object 'books'.

<sup>3</sup>In this paper, I concentrate on the split of a single modifier and setting aside the existence of multiple splits. However, the proposed analysis would be able to capture the facts of multiple split too.

- (6) **tiin-go** kal laik-an kitaab paṛh-kai.  
 three-CLF yesterday boy-PL book read.PF.3  
 ‘Yesterday, three boys read books.’  
 ‘Yesterday, the boys read three books.’

Splitting, however, is degraded from subject of transitive clause in Hindi as in (7). Unlike Magahi, the numeral ‘three’ cannot modify the subject ‘boys’ in (7). In (7a), the subjects have overt ergative case while in (7b) it is nominative.

- (7) (a) **tiin** kal laRkō=ne kitaabē paṛh-īi.  
 three yesterday boy.M.OBL.PL=ERG book[F].PL read-PF.F.PL  
 ‘Yesterday, the boys read three books.’  
 \*/?? ‘Yesterday, three boys read the books.’
- (b) **tiin** kal laRkē kitaabē paṛh rahe the.  
 three yesterday boy.M.PL[NOM] book[F].PL read PROG.PL be.PST.M.PL  
 ‘Yesterday, boys were reading three books.’  
 \*/?? ‘Yesterday, three boys were reading books.’

However, both Hindi and Magahi allow a split from subjects of Unaccusative and Unergative verbs (8)-(9) and also from Dative and Instrumental subjects as shown in (10)-(11)<sup>4</sup> respectively. In most of the cases, numeral is used but again facts are the same with other kinds of modifiers.

- (8) (a) **tiin** kal **kursi-yāā** tuṭ-īi.  
 three yesterday chair-PL[NOM] break-PF.F.PL  
 ‘Yesterday, three chairs broke.’ Hindi
- (b) **tiin-go** kal **kurisi** tuṭ ge-lai.  
 three-CLF yesterday chair[NOM] break go.PF.3  
 ‘Yesterday, three chairs broke.’ Magahi
- (9) (a) **tiin** kal **laRke** duaR-e.  
 three yesterday boy.M.PL[NOM] run.PF.M.PL  
 ‘Three boys run.’ Hindi
- (b) **tiin-go** kal **laik-an** duaR-lai.  
 three-CLF yesterday boy-PL[NOM] run-PF.3  
 ‘Three boys run.’ Magahi
- (10) (a) **lambe-vaale** kal **laRke=ko** bukhaar th-aa.  
 tall-PRT yesterday boy.M.PL=DAT fever be.PST-M.SG  
 ‘yesterday, the tall boy had a fever.’ Hindi
- (b) **lam-kaa** kal **laikwaa=ke** bokhaar ha-lai.  
 tall-PRT yesterday boys=DOM fever be-PRF.3  
 ‘Yesterday, the tall boy had a fever.’ Magahi
- (11) (a) **tiin** kal **laRkō=se** chalaā nahii ga-yaa.  
 three yesterday boy.M.OBL.PL=INST walk.PF.M.SG NEG go-PF.M.SG  
 ‘Yesterday, the three boys were not able to walk.’ Hindi
- (b) **tiin-go** kal **laik-an=se** chalal na ge-lai.  
 three-CLF yesterday boy-PL=INST walk.PF NEG go-PF.3  
 ‘Yesterday, the three boys were not able to walk.’ Magahi

Summing up this section, we looked at the core cases of splitting phenomena from a direct object and a subject in Hindi and Magahi. Split is possible from the unmarked object in both languages. Any

<sup>4</sup>We will see later that not all dative and instrumental subjects allow split in Hindi though. When there is a marked object in these constructions, split is not allowed. We will also see that it is not true that nominative and ergative subjects do not allow split in Hindi. When the object is oblique splitting is allowed. These will be a crucial point for my analysis later on.

prenominal constituent can be split off. However, Hindi and Magahi behave differently with respect to split from the marked object. Hindi does not allow splitting from the marked objects whereas Magahi does. Furthermore, Magahi allows split from all kind of subjects. Hindi, however, does not allow split from subject of transitive clauses. The overall generalization is presented in Table 1.

|         |                         | Magahi | Hindi |
|---------|-------------------------|--------|-------|
| Object  | NP                      | yes    | yes   |
|         | NP-DOM                  | yes    | no    |
| Subject | NOM of transitive       | yes    | no    |
|         | ERG of transitive       | NA     | no    |
|         | Subject of unaccusative | yes    | yes   |
|         | Subject of unergative   | yes    | yes   |
|         | Dative subject          | yes    | yes   |
|         | Instrumental subject    | yes    | yes   |

Table-1: (Im)possibility of split

### 3 Towards an analysis

The section presents an analysis to capture the asymmetry that is observed in the last section regarding splitting from an object and subject in Hindi and Magahi. Section (3.1) presents my proposals and assumptions that lead to an account for Magahi and Hindi data in section (3.2).

#### 3.1 Proposals and assumptions

To capture Hindi and Magahi facts, I make central use of the notion of “*Freezing effect*” (Wexler and Culicover 1980, Takahashi 1994, Stepanov 2007 and many others), the idea that *once a constituent moves it becomes opaque for extraction*. The freezing phenomenon is illustrated in (12)-(13). Extraction from the subject in (12) is possible because it occupies the base position i.e. Spec, vP. However, extraction is impossible in (13) because the subject moves to Spec, TP.

(12) [<sub>CP</sub> Who<sub>i</sub> [<sub>TP</sub> there [<sub>T</sub> is [<sub>vP</sub> [<sub>DP</sub> a picture of  $t_i$  ] [<sub>V</sub> [<sub>PP</sub> on the wall?]]]]]]]

(13) \*/? [<sub>CP</sub> Who<sub>j</sub> [<sub>TP</sub> [<sub>DP</sub> a picture of  $t_j$  ]<sub>i</sub> [<sub>T</sub> does [<sub>vP</sub>  $t_i$  [<sub>V</sub> hang [<sub>PP</sub> on the wall?]]]]]]]

I adopt three fundamental assumptions: ‘the chain uniformity condition’ (14), and ‘Shortest Move’ condition (15) from Takahashi (1994)’s account of the freezing effects and ‘the cycle principle’ as (16) from Chomsky (1994). The chain uniformity condition rules out any movement that disrupts the uniform status of the chain. To achieve this uniformity within the chain, D. Takahashi (1994) proposes a “Uniformity Corollary of Adjunction (UCA)”, a simplified version of that is stated in (14b). UCA disallows any adjunction to a part of a nontrivial chain. The principle of shortest move, on the other hand, only allows an element to move to the target position by a series of short successive adjunctions to maximal projections. This forces an element to reach its target position via successive cyclic movement. The successive cyclic movement in this theory is not a result of feature checking, but an outcome of the obligation that all chain links be as short as possible. The cycle principle, on the other hand, assumes an ordering of transformations in a derivation. According to this principle, the movement that involves the smallest domain is applied first i.e. movement targets the smallest domain first.

- (14) a. Chain Uniformity condition  
Chains must be uniform  
b. Uniformity Corollary on Adjunction (UCA)  
Adjunction to a part of a nontrivial chain is not allowed.

(15) Shortest Move: Make the shortest move.

(16) The cycle principle

Movement targets the smallest domain first.

### 3.2 Deriving the facts

In this section, we will look at the syntactic property of objects and subjects that distinguish Hindi from Magahi. We see that marked objects move out of VP in Hindi but not in Magahi. The unmarked objects, on the other hand, do not move out of VP in either language. We will see that how the UCA, the shortest move and the cycle principles block splitting from moved (marked) DOs. The unmoved (unmarked) DOs allow split because these principles are not violated by them.

Regarding subjects, we will see that splitting from a subject is not allowed in Hindi unless the object is oblique or there is no object in the clause. To capture this fact, I propose that transitive clauses which have two arguments with a structural case have an EPP feature in Hindi. Thus, there is a movement of subject in these cases and split is not allowed. However, splitting from all kind of subjects are allowed in Magahi. To capture this fact, I propose that there is no EPP feature on T at all in Magahi. Thus, there is no movement to Spec,TP in Magahi. The subject stays vP internally in Magahi. Consequentially, Magahi allows split from a subject of all type of clauses.

#### 3.2.1 The asymmetry on splitting from an object

The behavior of marked objects in Hindi is reminiscent of object shift (OS) in Germanic and Icelandic (Bobaljik and Jonas 1996). The crucial evidence that marked objects moves out of VP comes from the double object construction (Bhatt and Anagnostopoulou 1996). The base order for the double object construction can be taken as Subject-IO-DO-Verb. That is, the higher (first) NP is interpreted as a GOAL and the second NP is interpreted as a THEME (17). However, when both objects are case marked, the DO must precede the IO i.e. the higher (first) one is always interpreted as a THEME as in (18). Another evidence for OS of DO in Hindi comes from an example such as (19)- a pronoun which refers to human must be *-ko* marked and OS is forced.

- (17) Ram=ne Anita=ko<sub>[G]</sub> chhiṭṭhii<sub>[T]</sub> bhej-ii  
 Ram[M]=ERG Anita[F]=DAT letter send-PF.F.SG  
 ‘Ram sent a letter to Anita.’ (from Bhatt and Anagnostopoulou 1996)

- (18) (a) Ram=ne chhiṭṭhii=ko<sub>[T]</sub> Anita=ko<sub>[G]</sub> bhej-aa  
 Ram[M]=ERG letter[F]=DOM Anita[F]=DAT send-PF.M.SG  
 ‘Ram sent a letter to Anita.’ (from Bhatt and Anagnostopoulou 1996)

- (b) baabaa=ne sanṭi=ko<sub>[T]</sub> banṭi=ko<sub>[G]</sub> de di-yaa.  
 grandfather[M]=ERG Santee[M]=DOM Bantee[M]=DAT give give-PF.M.SG  
 ‘Grandfather gave Santee to Bantee.’

- (c) baabaa=ne banṭi=ko<sub>[T]</sub> sanṭi=ko<sub>[G]</sub> de di-yaa.  
 grandfather[M]=ERG Bantee[M]=DOM Santee[M]=DAT give give-PF.M.SG  
 ‘Grandfather gave Bantee to Santee.’

- (19) (a) jusuf=ne us=ko<sub>i</sub> nina=ko t<sub>i</sub> di-yaa.  
 Yusuf[M]=ERG he.OBL=DOM Nina[F]=DAT give-PF.M.SG  
 ‘Yusuf gave him/her/that to Nina.’ (from Bhatt 2007)

- (b) jusuf=ne nina=ko vo di-yaa.  
 Yusuf[M]=ERG Nina[F]=DAT DEM give-PF.M.SG  
 ‘Yusuf gave \*him/\*her/that to Nina.’ (from Bhatt 2007)

Like in Hindi, IO precedes DO in the canonical order in Magahi too. However, contrary to Hindi, in Magahi, when both objects are case marked, the higher one is interpreted as GOAL (20).

- (20) (a) baabaa sanṭi-aa=ke banṭi-aa=ke de de-l-thii.  
 grandfather Santee-FM=DAT Bantee-FM=DOM give give-PRF-3  
 ‘Grandfather gave Banty to Santee.’

- (b) baabaa banṭi-aa=ke sanṭi-aa=ke de de-l-thii.  
 grandfather Bantee-FM=DAT Santee.FM=DOM give give-PF-3  
 ‘Grandfather gave Santee to Bantee.’

Furthermore, unlike Hindi, the DO pronoun which refers to human follows the IO in Magahi, as in (21).

- (21)    *santi-aa    banti-aa=ke    hamnii=ke de    de-l-kai.*  
           Santee-FM Bantee.FM=DAT we=DOM    give give-PF-3  
           ‘Santee gave us to Bantee.’

From the above data, we can conclude that the marked DO moves out of VP in Hindi but it stays VP-internal in Magahi.

Now, let us see how (14), UCA, in conjunction with (15), Shortest Move and (16), the cycle principle rules out splitting from the marked object in Hindi. Consider the derivation of example (22a). Given the vP-internal subject hypothesis, the subject ‘the boys’ is base generated at Spec, vP and the object ‘three books’ is base generated as a sister of V as shown in (22b). In accordance with object shift (OS), the marked object moved from object position to the external Spec, vP, leaving behind the copy as in (22c). The numeral ‘three’ is then extracted from the higher copy. In accordance with the Shortest Move, it first must adjoin to the maximal projection of DP dominating it, as shown in (22d). However, this movement is ruled out by UCA, because it involves adjunction to part of a nontrivial chain. Given UCA, then, the numeral ‘three’ must skip adjunction to DP and adjoin to the next higher available projection vP as shown in (22e). However, this movement violates the Shortest Move because it skips the first potential landing site i.e. adjunction to dominating DP. Thus, numeral ‘three’ cannot reach its target position without violating the condition UCA or Shortest Move. The extraction is also not possible from the lower copy at stage (22c) because then similar consideration applies. The extraction is also not possible from the lower copy at stage (22b) because then similar consideration applies: adjunction of numeral ‘three’ to the maximal projection of DP violates the UCA whereas skipping this step and adjoining to VoiceP would violate the Shortest Move. One might also argue that at stage (22b) the split takes place first before the OS. But the derivation is ruled out by (16), the cycle principle, because the OS targets a smaller domain i.e. vP than the split which targets the larger domain i.e. CP. Thus, splitting the DP before OS violates the condition (14) and/or (15)/(16).

- (22) (a) \**tiin    kal    laRkõ=ne    kitaabõ=ko    paRaa.*  
           three    yesterday boy.OBL.PL=ERG book.OBL.PL=DOM read.PF.3P.M.
- (b) [<sub>VP</sub> [<sub>DP-sub</sub> boys-NE [<sub>VP</sub> [<sub>DP-obj</sub> three books-KO] [<sub>v</sub> read]]]]].
- (c) [<sub>VP</sub> [<sub>DP</sub> three books-KO] [<sub>VP</sub> [<sub>DP</sub> boys-NE [<sub>VP</sub> [<sub>DP</sub> three books-KO] [<sub>v</sub> read]]]]]]].  
           Object shift
- (d) \* [<sub>VP</sub> [<sub>DP</sub> three [<sub>DP</sub> three books-KO] [<sub>VP</sub> [<sub>DP</sub> boys-NE [<sub>VP</sub> [<sub>DP</sub> three books-KO] [<sub>v</sub> read]]]]]]].  
           Violates the UCA
- (e) \* [<sub>VP</sub> three [<sub>VP</sub> [<sub>DP</sub> three books-KO] [<sub>VP</sub> [<sub>DP</sub> boys-NE [<sub>VP</sub> [<sub>DP</sub> three books-KO] [<sub>v</sub> read]]]]]]].  
           Violates the shortest move

The split is possible from unmarked objects in both Hindi and Magahi and from marked objects in Magahi because these objects do not undergo movement. Neither conditions (14), (15) and (16) violate in these cases.

### 3.2.2 The asymmetry on splitting from a Subject

Now, let us move to the subject. Consider the Hindi examples (23)-(24), first. In (23), the subject bears ergative case. But only (23b) allows split. In (24), the subject bears Nominative case. But only (24c) allows split. The difference between (23a) and (23b) is that in (23a) both arguments are structurally case marked whereas in (23b) only the subject is structurally case marked. The object

bears an oblique case. The same is true for (24a & b) and (24c). In (24a & b) both arguments are structurally case marked whereas in (24c) only the subject is structurally case marked. The object bears an oblique case. Furthermore, (25)-(27) allow splitting from subjects. These clauses do not have any object at all. (25) is a dative construction. In (26), the verb is unaccusative while in (27) the verb is unergative. Magahi, on the other hand, allows splitting from all these cases (Magahi data are not mentioned here because of the length constraint, but see example (8)-(11) in section (2)).

- (23) (a) \*/?? **tiin** kal **laRkō=ne** kitaabē paṛh-īi.  
 three yesterday boy.M.OBL.PL=ERG book.PL read-PF.F.PL  
 ‘Yesterday, three boys read books.’
- (b) **tiin** kal **laRkō=ne** raam=kii madad k-i.  
 three yesterday boy.M.OBL.PL=ERG Ram=GEN help do-PF.F.SG  
 ‘Three boys helped Ram, yesterday.’
- (24) (a) \*/?? **tiin** kal **laRke** kitaabō=ko paṛh rahe th-e.  
 three yesterday boy.M.PL[NOM] book.OBL.PL=DOM read PROG.M.PL be.PST-M.PL  
 ‘Yesterday, three boys were reading books.’
- (b) \*/?? **tiin** kal **laRke** kitaabē paṛh rahe th-e.  
 three yesterday boy.M.PL[NOM] book.PL read PROG.M.PL be.PST-M.PL  
 ‘Yesterday, three boys were reading books.’
- (c) **tiin** kal **laRke** mujh=se mil-e.  
 three yesterday boy.M.PL[NOM] I.OBL=INST meet.PST-M.PL  
 ‘Three boys met me, yesterday.’
- (25) **unke** kal **laRke=ko** bukhaar th-aa.  
 he.OBL.GEN yesterday boy.M.OBL.PL=DAT fever be.PST-M.SG  
 ‘Yesterday, his son had fever.’
- (26) **tiin** kal **kursiyāā** tuṭ-īi.  
 three yesterday chair.F.PL[NOM] break-PF.F.PL  
 ‘Three chairs broke, yesterday’
- (27) **tiin** kal **laRke** dauR-e.  
 three yesterday boy.M.PL[NOM] run-PF.M.PL  
 ‘Three boys ran, yesterday.’

This asymmetry, within the terms of our analysis, can be captured assuming that in (23a) and (24a & b) the subject moves to Spec, TP, but in (23b), (24c), (25), (26) and (27) it does not. In Magahi, on the other hand there is no movement of subject to Spec, TP. The independent evidence for the hypothesis that splitting is not allowed from a subject when it moves to Spec, TP comes from (28), a dative construction with a marked object. Unlike (25), splitting is degraded in (28). The reason for this degradation is that (28) the object is marked. We saw in the last section that marked DOs undergo OS. Thus, in (28), OS forces the marked object to move to the edge of vP. However, this derivation yields wrong word order: DO-Sub-V. The acceptable sentence is obtained when dative subject moves and precedes the marked object. Since, there is a movement of subject in (28), splitting is not allowed<sup>5</sup>

- (28) \*/?? **tiin** kal **bacchō=ko** kitaabō=ko paṛhnaa  
 three yesterday boy.M.OBL.PL=DAT book.F.OBL.PL=DOM read.INF  
 chaahiye th-aa.  
 should be-PRF.M.SG  
 ‘Yesterday, three boys should have read the books.’

<sup>5</sup>(28) is a bi-clausal structural where embedded infinitival clause is subcategorized as subject of the main verb. However, this does not effect our analysis.

Now, the question is what theoretical mechanism forces the subject to move to the Spec, TP in (23a) and (24a & b)? All these above examples can be described in term of (29).

- (29) Splitting from a subject is not allowed in Hindi unless the object is oblique or there is no object in the clause.

To incorporate this empirical generalization into the theory, I propose the following parametric condition (30) that states that transitive clauses (clauses where two arguments are merged in the vP domain and get a structural case) bear an EPP feature. Hindi says YES to (30) whereas Magahi says NO.

- (30) Transitive clauses (clauses where two arguments are merged in the vP domain and get a structural case) bear an EPP feature. (NO: Magahi; YES: Hindi)

Now, let us go back to the examples. (23a) and (24a & b) do not allow split because these are transitive clauses in terms of (30). Thus, it has EPP feature on T that forces the subject to move to the Spec, TP. As a result, splitting is impossible from the subject because the UCA or Shortest Move or the cycle principle is violated. (23b), (24c), (25), (26) and (27) allow splitting of the subject. The reason is that there is no EPP feature on T in these clauses, given in (30). Thus, there is no movement of subject to the Spec, TP. As a result, splitting is allowed for the subject because the UCA, the Shortest Move and the cycle principle do not apply.

We captured the asymmetry of (23)-(27) with the help of principle (30). But, what sort of principle is it? The principle relates externalization of an argument with Case feature. In this sense, it seems similar to Alexiadou and Anagnostopoulou (2006)'s proposal: the subject-in-situ generalization (SSG), given in (31).

- (31) The subject-in-situ generalization (SSG)

By Spell-Out, vP can contain only one argument with a structural Case feature.

However, (30) and (31) have different properties. As (30), (31) also relates externalization of an argument with Case feature, but (31) does not make any discrimination between the subject and the object. (31) is satisfied as long as one of the arguments moves out of vP. In this respect, it takes the interpretation of EPP as a general principle, and not as a property of T. (30), on the other hand, relates the case feature to EPP on T. Thus argument externalization only affects the subject. In this sense, it takes EPP as a property of T. (30), unlike (31), could not be universal. It is parameterized as we have seen: Hindi says YES to it, but Magahi says NO.

## 4 Conclusion

In this paper, I examined the syntactic phenomenon of split construction in Hindi and Magahi. Particularly, I investigated the property of split from subjects and direct objects (DO). Hindi allows split from unmarked DOs but not from marked DOs. Magahi, on the other hand, allows split from both marked and unmarked DOs. Furthermore, Magahi allows split from subject of all kind of clauses whereas Hindi only allows split from Dative and Instrumental subject and the subject of Unaccusative and Unergative, but not from the subject of transitive clauses. In order to provide a unified account, I followed the *“freezing effects”* (Wexler and Culicover 1980, Takahashi 1994, Stepanov 2007 and many others). I adopted *“Chain Uniformity condition”* and *“shortest move”* from Takahashi (1994) and *“the cycle principle”* from Chomsky (1964) to block the extraction of an element from a moved constituent. I showed that marked objects in Hindi move out of VP whereas there is no such movement in Magahi. Therefore, the UCA, the principle of shortest move and the cycle principle apply to the marked DOs in Hindi. Since there is no movement in Magahi, these principles are not applied in Magahi. I extended this analysis to the domain of subjects and argue that subjects in Magahi always stay vP internally giving rise to the possibility of split from any type of subject whereas in Hindi in two cases, subject moves to the Spec, TP. One, when OS takes place, it forces subject to move to Spec TP as in the case of dative construction with marked object and second when two arguments are merged in the vP domain and get a structural case, the subject



moves to the Spec, TP. I showed that these are the two cases in Hindi where split from a subject is not allowed.

**Learnability issue: Acquisition and EPP:** In this paper, the asymmetry between Hindi and Magahi is captured based on the notion of EPP. I argued that Magahi does not have EPP feature at all. For Hindi, I have argued that certain clauses have EPP feature but others do not. This sounds like a problem for learnability. However, I shown that whenever, T has EPP feature in Hindi it is a well defined syntactic environment. Thus, I argue that proposed system is quite learnable. I propose that a correlation between object shift and availability of Spec, TP as a position gives a child the linguistic clue that Spec, TP is required. In other words, a child may learn on the basis of evidence from the OS that spec, TP is licensed as a subject position in Hindi. Furthermore, a child may also learn that Spec TP is licensed as a subject position in Hindi when there are two arguments in vP internally and both are structurally case marked.

## Acknowledgments

Great thanks to Prof. Mark C. Baker, Veneeta Dayal and Ken Safir for insightful discussions. Thanks also to Ayesha Kidwai, Klaus Ables, Naga Selvanathan, Ümit Atlamaz, Yi-Hsun Chen, Mayank, Atul, my classmates and the audience of Rutgers' Syntax-lab meeting. I also thank to Ritesh and Sriniket who assisted me in proofreading this draft. Needless to say, all remaining errors are my own.

## References

- Aissen, Judith. 2003. Differential object marking: Iconicity vs. economy. *Natural Language and Linguistic Theory* 21(3):435–483.
- Alexiadou, Artemis and Elena Anagnostopoulou. 2006. The subject-in-situ generalization revisited. In H.-M. Grtner and U. Sauerland, eds., *Proceedings of the Workshop on Interfaces Recursion Language?*. Mouton de Gruyter.
- Bhatt, Rajesh. 2007. Unaccusativity and case licensing. Handout, McGill University.
- Bhatt, Rajesh and Elena Anagnostopoulou. 1996. Object shift and specificity: Evidence from ko -phrases in hindi. In K. S. L. Dobrin and L. McNair, eds., *Papers from the 32nd Regional Meeting of the CLS*, vol. 1, pages 11–22.
- Bobaljik, Jonathan David and Dianne Jonas. 1996. Subject positions and the roles of tp. *Linguistic Inquiry* 27:195–236.
- Chomsky, Noam. 1994. *Current issues in Linguistic Theory*. The Hague: Mouton.
- Comrie, Bernard. 1989. *Language Universals and Linguistic Typology: Syntax and Morphology*. Chicago: University of Chicago Press. 2nd Edition.
- Fanselow, Gisbert and Damir Ćavar. 2002. Distributed deletion. In A. Alexiadou, ed., *Theoretical approaches to universals*, pages 65–107.
- Fanselow, Gisbert and Caroline Féry. 2006. Prosodic and morphosyntactic aspects of discontinuous noun phrases - a comparative perspective. Unpublished Manuscript, Potsdam: University of Potsdam.
- Mohanan, Tara. 1993. Case alternation on objects in hindi. *South Asian Language Review* 3(1):1–30.
- Self, Stephen. 2012. Differential -ko marking: Case and object-marking in hindi. AL5313 - Advanced Grammatical Analysis. GIAL.
- Singh, Mona. 1994. Thematic roles, word order, and definiteness. In G. Ramchand, ed., *Theoretical perspectives on word order in South Asian languages*, pages 217–236. Chicago: University of Chicago Press.
- Stepanov, Arthur. 2007. The end of ced? minimalism and extraction domains. *Syntax* 10(1):80–126.
- Takahashi, Daiko. 1994. *Minimality of movement*. Ph.D. thesis, University of Connecticut, Storrs.
- van Riemsdijk Henk. 1989. Movement and regeneration. In P. Beninc, ed., *Dialect Variation and the Theory of Grammar*, pages 105–136. Dordrecht: Foris Publications.
- Wexler, Kenneth and Peter. Culicover. 1980. *Formal principles of language acquisition*. Cambridge, Mass: MIT Press.