RAISING FROM A TENSED CLAUSE IN MAITHILI ITS IMPLICATIONS FOR BINDING AND CASE THEORIES

Yogendra P. Yadava
Central Dept. Of English
Tribhuvan University

Introduction

Maithili has a rule which is analogous to the Raising-to-Subject rule of English. We refer to this rule as Subject-to-Subject Raising. The rule in question has the following interesting property. This Maithili rule raises the subject of a *tensed* embedded clause, whereas the English Raising-to-Subject rule raises to the matrix subject position the subject of a *tenseless* embedded clause. Obviously, the NP-trace in the former case apparently violates one of the principles of UG proposed in Chomsky (1981), viz., the binding principle for anaphors, since it is *not* bound in its governing category. We demonstrate, however, that the NP-trace *does* obey the binding principle. What is required here is to investigate this fact from the perspective of the parametric variation that distinguishes Maithili-type languages from non-Maithili-type languages.

This article consists of three sections. In the first section we analyze the raising constructions in Maithili. In the second section we present arguments in support of the rule of Subject-to-Subject Raising in Maithili. In the third section we make certain theoretical proposals to facilitate the application of binding principle (A) for the antecedent/ NP-trace relation in Maithili.

The Phenomenon

As noted above, by the rule of Subject-to-Subject Raising, the subject of a tensed embedded clause is optionally raised to the empty subject NP position (viz., $[_{NP}e]$) in the matrix clause. The rule applies only if the matrix predicate is a member of the class known as "raising predicates", e.g. *seem*-type verbs. Such verbs in Maithili includes *lagnai, bujhenai, pratit bhenai,* and the like, all of which mean "to seem".[1] Consider the structures in (1):

(1)　(i)　$[_S [_{NP}e]$ lagaet aich $[_{S''} \cdot j^e [_{S''} [_{S'}$

seems

$[_S$ ahã　āi　ghar　nai　jā　sakab$]]]]$
　　　 - you　today　home　not　go　can

"It seems that you cannot go home today."

(ii)　$[_S [_{NP}ahã_i]$ lagaet chi　$[_{S''}$je　$[_{S''} [_{S'} [_S t_i$

āi　ghar　nai　ja　sakab$]]]]]$

"You seem not to be able to go home today."

In (1), the rule takes structure (i) as its input and derives structure (ii) by preposing the embedded subject *ahã* to the empty subject position in the matrix clause.

Like all syntactic rules within the REST framework (Chomsky and Lasnik 1977), this rule too is optional. Thus, if the rule applies, we derive structures like (1i). It is interesting to note that (1i) can surface as a perfectly acceptable sentence even if the matrix subject (viz. $[_{NP}e]$) position is unfilled. Besides, we can have another option as well: $[_{NP}e]$ position may optionally be filled by i ("it")[2]. For this option, we postulate a rule of i- insertion like it– insertion in English. The operation of the rule turns (1i) into 2):

(2)　$[_S [_{NP}i]$ lagaet aich $[_{S'''} j^e [_{S''} [_{S'} S ahã$

āi　ghar nai　ja　sakab$]]]]$

Evidence

In this section we are going to present some empirical and theoretical motivations for the rule of Subject-to-Subject Raising.

Intuition

The primary evidence for Subject-to Subject Raising is the existence of pairs of sentences like (3i) and (3ii). The NP, which is the subject of the embedded clause in (3i), appears in the subject position of the matrix clause in (3ii):

(3)　(i)　lagaet　　　aich　je　barsa ai　　nai　haet
　　　　　　 seems　　　　that　rain　today　not　will be
　　　　　 "It seems that it will not rain today."

(ii)　barsā lagaet aich　je āi　nai haet

The native speakers of Maithili intuitively feel that (3i) and (3ii) have a paraphrase relationship. It is, therefore, necessary for an optimal grammar of Maithili to

relate (3i) to (3ii) in some fashion. One plausible way in the GB (Government-Binding) framework is to say that (3ii) is derived from (3i) by raising the embedded subject to the matrix subject position.

Gap

There is a gap in the embedded subject NP position of sentences like (3ii). The gap is indicated by $[_{NP}e]$ in (4):

(4) barsā lagaet aich je $[_{NP}e]$ āi nai haet

If the gap is obligatory in (4), then we expect that no lexical NP can appear in $[_{NP}e]$ position. This expectation holds true, in that the replacement of the empty element e by some lexical NP is barred. This is shown by (5):

(5) *barsa lagaet aich je $[_{NP}k\bar{a}_j]$ āi nai haet

work

Furthermore, the empty element is always coreferential with matrix subject *barsa*. Given these observations, there can be two possibilities: $[_{NP}e]$ is a control PRO (in the sense of Chomsky (1982)) or a trace. PRO is excluded from this position on two theoretical grounds. First, PRO must satisfy the following condition (Chomsky (1981, 1982)),

(6) PRO is ungoverned

Suppose we assume that the subject position of a tensed clause is governed. $[_{NP}e]$ in (4) is the subject of a tensed clause; so it is governed by our assumption. By condition (6) PRO cannot be governed. Hence, it cannot appear in the governed $[_{NP}e]$ position.

The second ground that prohibits PRO from appearing in the $[_{NP}e]$ position of (4) is the requirement that the antecedent of PRO must be in a θ-position; i.e., a position where θ - roles like agent, goal, recipient, etc., can be assigned. The reason is that PRO, unlike trace, does not pass its θ - role to its antecedent. In (4) the antecedent *barsa* appears in a θ-position, since the verb *lagnai*, a *seem*-type verb, does not assign any θ-role to its subject. If we take $[_{NP}e]$ to be PRO, the matrix subject would not have any θ-role. Thus, the choice of PRO in (4) is ruled out by the Θ-criterion.

The second possibility, namely that $[NPe]$ is a trace, sounds quite plausible. The

antecedent of a trace must be in a Θ-position, since the trace passes its Θ-role to its antecedent. As mentioned earlier, the antecedent **barsa** in (4) satisfies this requirement. Hence, trace is permitted in the embedded subject position.

Now, if [$_{NP}e$] can be nothing but trace, it follows from the trace theory that (3ii) is derived from (3i) by a movement rule. (It only remains to choose between subject-to-subject Raising and some other type of movement.)

Subject-Verb Agreement

A strong piece of evidence for Subject-to Subject Raising rather than some other type of movement in the cases we are interested in is provided by the agreement of the matrix verb with the raised NP. As pointed out, if the construction in question does not involve raising, the matrix subject can be either *i* or PRO. In that case, the matrix verb agrees with the person of the existing subject: *i* or PRO. But, after raising, the matrix verb changes its inflectional ending to agree with the person (and honorificity) of the raised NP. These phenomena are shown by the structure in (7):

(7)   (i) $\begin{Bmatrix} i \\ PRO \end{Bmatrix}$ lagaet   aich   je   ahã
                    it-3   seem   be-Pres+ 3   that   you
                           gari   nai   pakair   sakab
                           train   not   catch   can
                           "It seems that you cannot catch the t rain."
      (ii)   ahã   lagaet chi   je gari
             you 2hon. seem be-Prest 2hon.
             nai   pakair   sakab

Notice that **aich** is inflected for the third person subject *i* or PRO in (7i). But it changes into *chi* to agree with the second person honorific subject *ahã* in (7ii). The agreement of this type can be accounted for only if we assume that the embedded subject in (7i) has been raised to no other matrix position than that of the subject in (7ii). [3]

Nominative Case

In all the cited examples of Subject-to-Subject Raising, we can see that the moved NPs are in nominative case. Note that an NP receives nominative case if and only if it appears in the subject position. It then follows that the rule in question involves Subject-to Subject Raising.

i-Insertion

As observed earlier, the rule of i-insertion my (optionally) apply to fill the

empty subject position in a raising construction. But this rule cannot apply if the embedded subject has been raised to the subject position of the matrix clause. Thus, we can have (2) with *i*-insertion and (1ii), involving the raising of the embedded subject to the matrix subject position, but we cannot have (8), which involves both *i*- insertion and raising:

(8) * ahā i lagaet achi je ãi ghar nai jā sakab

Note the [NPe] is the matrix subject position and that it can be filled by only one NP. We already know that *i*-insertion takes place within [NPe] position. The only way whereby we can rule out (8) is to assume that the embedded subject is also raised to the same [NPe] position where *i* appears. [NPe] position can allow one of the two elements -- *i* or *ahā* -- to appear within it. Thus, (2) and (1ii) are permissible, while (8) is out. These facts support the stipulation of Subject-to Subject Raising in Maithili raising constructions.

Resumptive Pronoun

This type of raising of the embedded subject cannot be a case of non-local Topicalization/Focussing, since the raised NP cannot be cliticized with the topic/focus marker - *da* ('as to'). This possibility is ruled out for another reason as well. If non-local Topicalization/Focussing moves a NP from an embedded clause to the matrix clause, it leaves behind either a trace t or a resumptive pronoun:

(9) (i) [S" [T... NPe -da ... [S' [s [NPe] lagaet aich

			seem	
[S'" je[S" [S' [S rām	ghar		par	nai
that Ram	home		at	not

chaeth]]]]]]]]
is
"It seems that Ram is not at home."

(ii) [S" [T... NP ram$_i$ - da ...] [S' [S [NPe] lagaet

aich [S'" je [S" {S' [S $\begin{Bmatrix} t_i \\ o_i \end{Bmatrix}$ ghar par nai

chaeth]]]]]]]

But the type of raising we are concerned with does not leave any resumptive pronoun, but just a trace t. This is shown by the unacceptability of (10ii):

(10) (i)   rām$_i$ lagaet chaeth   je t$_i$ ghar par nai chaeth

(ii) * rām$_i$ lagaet   chaeth   je oi   ghar par nai chaeth

Furthermore, *i*-insertion, which cannot apply along with the raising in question, is permitted after Non-local Topicalization/Focussing:

(11) (i) * rām$_i$ i   lagaet chaeth   je ghar   par nai chaeth

(ii)   rām$_i$ -da i   lagaet   aich   je (o) ghar par nai chaeth

Notice that in (10i), the verb *chaeth* agrees with *ram* in person and honorificity

(whereas *aich* in (11ii) does not agree with *ram*); hence, it cannot cooccur with *da*-marking, resumptive pronoun, or i-insertion. These facts can be explained if we recognize that there are two types of interclausal raising in Maithili, one involving raising-to-Topic/Focus, and the other involving raising-to-subject. The latter process is what we call Subject-to-Subject Raising.

NP-Trace in Maithili and Binding Theory

In this section we show how the binding principle for anaphors holds for Maithili NP-trace, though prima facie it appears to be violated.

Theoretical Background

As noted earlier, following the trace theory of movement rules, the rule of Subject-to-Subject Raising preposes the embedded NP subject to the empty matrix subject position and leaves behind a trace t, which is obviously an NP-trace. (See example (1) in this connection.) The NP-traces in structures like *John$_i$ seems t$_i$ to be happy* are, unlike other traces, locally A-bound and called anaphors.

For the antecedent-anaphor relation, Chomsky (1981) proposes binding principle (A):[4]

(A) **An anaphor is bound in its governing category.**

Consider the raising constructions in (12) and (13):

(12)   (i)   [S$_1$ [NPe] INFL seem [S$_2$ John to be tired]]

        (ii)   [S$_1$ [NP John$_i$] INFL seem [S$_2$ t$_i$ to be tired]]

(13)   (i)   [S$_1$ [NPe] INFL seem [S$_2$ John INFL be tired]]

        (ii)   [S$_1$ [NP John$_i$] INFL seem [S$_2$ t$_i$ INFL be tired]]

Structures (12ii) and (13ii) are derived from (12i) and (13i), respectively, by NP movement. But the former is acceptable, while the latter is not. The difference in their grammatical status can be explained in terms of binding principle (A). In (12ii) S$_1$ is the governing category for the NP-trace, since it contains the governor *seem*, the governed element t and the accessible SUBJECT INFL. Since it is bound to *John* in S$_1$ it obeys binding principle (A). Structure (13ii), on the other hand, does not obey principle (A). In this case S$_2$ is the governing category for the NP-trace, as it is governed by INFL and has AGR as its accessible SUBJECT. But it is free within S$_2$, violating binding principle (A).

Problems

Principle (A) of binding theory requires that NP-trace appear only as the subject of an infinitive, as shown in (12ii), but it is excluded from the subject position of a finite clause, as in (13ii). NP-trace in Maithili, however, does appear as the subject of an embedded finite clause in a raising construction, as shown in (1ii), repeated as (14):

(14) $[_S$ $[_{NP}$ ahã̃$_i$] lagaet chi [S''' je [S'' [S' [S t_i ãi
ghar nai jã sakab]]]]]

This interesting phenomenon in Maithili raises two important issues for the GB-framework. They are: (i) NP-trace is Case-marked and (ii) though it is locally A-bound and, therefore, an anaphor, it is free in its governing category.

Problem (i) has to do with the theory of Case, which allows an NP-trace to be governed but not Case-marked (so as to avoid Case conflict). For example, the matrix verb *seems* in (15) governs the NP-trace, but it does not assign Case to it.

(15)   John$_i$ seems [S t_i to be sick]

In Maithili structure (14), however, the NP-trace is both governed and Case-marked by the embedded COMP.

The second problem pertains to the violation of binding theory. That is to say, the embedded S''' in(14) contains both the governor (the embedded COMP) and the governed element (NP-trace). (In an earlier study (Yadava 1983)), I have argued that a governing category does not require "accessible Subject" in Maithili-type languages.). It is, therefore, the governing category for the NP-trace. Now, binding principle (A) requires that NP-trace, which is an anaphor, be bound in its governing category. But it is free in the embedded S'''.

Solutions

Both these problems can be resolved if we assume that it is not the embedded COMP but the matrix verb which governs the NP-trace in constructions like (14). Prima facie, the assumption does not seem to fit in the analytical framework we have so far assumed. To illustrate the point, consider the configuration in (16), representing (14):

(16)... α [S''' .... β ....], where α=matrix verb = COMP, and β = NP-trace. In this configuration, α (=matrix verb) cannot govern β (=NP-trace), since S''', a maximal projection, includes β but not α.

Suppose that in Maithili there is an S'''- deletion rule,which may (optionally) apply if the matrix verb is a raising-type. If the rule does not apply, raising-to-subject is prohibited by Case theory, since Case would be assigned to an NP by COMP in both the matrix and embedded subject positions, resulting in Case-conflict. Thus,(11i) is quite acceptable, but the following configuration of (1ii) is not permissible (although its surface form is perfectly acceptable):

17 * $[_{S'''}$ COMP $[_{S''}$ $[_{S'}$ $[_{NP}$ ahã̃$]$ $[_{VP}$ $[_V$lagaet chi] $[_{S'''}$ [COMP je] [s'' [$_{S'}$ t_i ã$_i$ ghar nai jã sakab]]]]]]]]]

If S''' deletion rule applies, then (17) changes into (18):

(18) $[_{S'''}$ COMP $[_{S''}$ $[_{S'}$ [$_{NP}$ ahã̃ $[_{VP}$ $[_V$ lagaet chi Je] $[_{S''}$ $[_{S'}$ $[_S$ t_i ãi ghar nai jã sakab]]]]]]]]]

This causes the complementizer je not to bear the COMP function which it would otherwise bear (configurationally, bearing the COMP function depends on having an S''' mother); So je loses its COMP node and , being homeless, it is cliticized to the matrix verb (Viz., *lagait chi*). If so, then the matrix verb becomes the nearest eligible governor for the NP-trace. But since the matrix verb is intransitive, it does not Case-mark the NP-trace. Thus, the stipulation of an S'''-deletion rule resolves the first problem we noted: the NP-trace is governed but not Case-marked in (18).

This stipulation also solves the second problem. Given the rule of S''' delection with raising predicates, the embedded S''' is deleted and no longer remains the governing category for the NP-trace in (18). Now, the only node which can be the possible governing category for the NP-trace is the matrix S''', in that it contains both the governor *lagaet chi je* and the NP-trace. In this situation, the NP-trace is locally A-bound to its antecedent *ahā* in its governing category S'''. Thus, NP-trace in Maithili satisfies Principle (A) of binding theory and does not remain an exception to the principle of UG, as it appeared earlier.[5]

Summary

To recapitulate, in this article we have analyzed the rule of Subject-to-Subject Raising in Maithili and shown how the NP trace left behind observes the binding principle for anaphors. Interestingly, the rule in question raises the subject of a tensed clause to the matrix subject position in a raising construction. The rule applies optionally. If it does not apply, the matrix subject position may remain empty (realized as impersonal pro) or be filled by impersonal i. We have then presented arguments in support of the rule in question. These arguments are based on facts relating to intuitive judgement, gapping, Case-marking, resumptive pronoun, subject-verb agreement and i-insertion. Finally, we have briefly sketched the theoretical assumptions about the binding principle for anaphors and presented two apparent problems facing the binding and Case theories due to raising-to subject from a tensed clause in Maithili. We have tried to resolve these problems in terms of the following theoretical proposals:

(a) a redefinition of "governing category" as the minimal Sor NP containing the governor and the governed element for Maithili-type languages, concomitantly, a rejection of cross-linguistic validity of Chomsky's (1981) definition, which mentions "accessible SUBJECT";

(b) the base -generation of INFL as part of V in Maithili;

(c) government of (and Case-assisgnment to) the subject NP by COMP in Maithili; and

(d) an S'''- delection rule in Maithili, which is optionally triggered by raising verbs.

to P. Dasgupta and K.A. Jayaseelan for their insightful comments on its earlier version. The errors, if any, are my own.

NOTES

1. Note that Maithili, unlike English, does not have raising adjectival constructions.
2. The optionality of *i*–insertion may be attributed to the pro-drop property which Maithili shares with languages like Italian and Spanish. (For details, see Jaeggli (1980) and Chomsky (1981)). Languages with this property have overt subject-verb agreement manifested by a "sufficiently" rich inflection system and thus permit a pronoun subject to be dropped. For further discussion on pro-drop in Maithili, see chapter 4 in Yadava (1983).
3. Cf. *ahā lagaet aich je gari nai pakair sakab*, which is a variant subject- verb agreement. For their difference, see Yadava (1983:137-9).
4. For the detailed discussion of the theoretical concepts involved therein, see chomsky (1981).
5. Furthermore,the stipulation of S'''-delection is also consistent with another principle of UG, viz, the Empty Category Principle (ECP), which states that an EC must be properly governed. In structures like (18), the matrix verb **lagaet chi** properly governs the NP-trace after S'''- deletion takes place.

References

Chomsky, N., 1981. *Lectures on Government and Binding*. Dordrecht: Foris Publications.

Chomsky, N., 1982. *Some Concepts and Consequences of the Theory of Government and Binding. Linguistic Inquiry Monograph Six*, Cambridge: The MIT Press.

Chomsky, N. and H., Lasnik., 1977. "Filters and Control". *Linguistic Inquiry*, 8, pp. 425-504.

Jaeggli, 0., 1980. "On Some Phonologically-Null Elements in Syntax." Unpublished Ph. D. dissertation, MIT.

Yadava, Y.P., 1983. "Movement Rules in Maithili and English: their Implications for the Theory of Government and Binding." Unpublished Ph.D. dissertation, Hyderabad: CIEFL.