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Unaccusativity and Case Licensing

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1 Overview

The licensing of overt arguments and case

Argument Structure and the ability to license Case

Two Case Studies:

- Variable Case Marking of Subjects: a process similar to the more familiar phenomenon of Differential Object Marking (DOM) - different kinds of objects are treated/marked differently by the grammatical system.

- Like DOM, the variable case marking on the subject correlates with interpretation.

- Unlike DOM, variable case marking seems to only be available with a subclass of predicates, namely the unaccusatives.

- Burzio's Generalization violating Passives

Analysis:

- Unaccusative *v* can assign case.

- the unmarked case licensed in DOM/variable case marking is licensed by unaccusative *v* and is associated with a non-specific reading. This reading is related to Diesing-style limitations on what can be interpreted VP-internally and at least in some cases to pseudo-incorporation as analyzed in Dayal (2003).

2 Differential Object Marking

Hindi-Urdu has been documented extensively as displaying the phenomenon of Differential Object Marking (cf. Butt (1993), Masica (1982), Mohanan (1995), Singh (1994) i.a.).

(1) Differential Object Marking:

- a. 1st and 2nd pronominal objects, animate proper name object: *-ko* is **required**.

Mina **tum-*(ko)/Tina-*(ko)** dekh rahii thii
Mina.f you-KO/Tina-KO see Prog.F be.Pst.FSg
'Mona was looking at you/Tina.'

- b. 3rd person pronominal objects: *ko* is **optional**, optionality correlates with animacy

Mina **us-ko/vo** uṭhaa rahii thii
Mina.f 3P-KO/3P lift Prog.F be.Pst.FSg
'Mona is lifting it/him/her (with *ko*); lifting it/*him/*her (without *ko*).'

- c. ordinary animate NPs: *ko* is **optional**, optionality correlates with interpretation.

Mina **ek bacca/e(-ko)** uṭhaa rahii hai
Mina.f a/one child-KO lift Prog.F be.Prs.3Sg
'Mina is picking up a child/a particular child.'

- d. ordinary inanimate NPs: *ko* is **optional**, optionality correlates with interpretation.

Mina **haar(-ko)** uṭhaa rahii thii
Mina.f necklace-KO lift Prog.F be.Pst.FSg
'Mina was picking up a/the necklace.'

- e. non referential NP: *ko* is **ruled out**, * under idiomatic interpretation

Mina **ungalii-tak-(*ko)** nahī: uṭhaa-egii
Mina.f finger.f-even-KO Neg lift-Fut.3FSg
'Mina won't even lift a finger.'

- f. non referential NP (part of NP+V predicate): *ko* is **ruled out**

Yunus [**kaṛii mehnat**]-(*ko) kar rahaa hai.
Yunus.m hard.f work.f-KO do Prog.MSG be.Prs.3Sg
'Yunus is working hard.'

- the presence of *-ko* correlates with animacy and specificity.

Open Question: does the presence/absence of *-ko* have a structural consequence? i.e. are *ko*-marked direct objects and non-*ko*-marked direct objects licensed in the same configuration?

(2) Assumptions about Case-licensing:

a. Finite T^0 licenses nominative case, whose realization is ϕ .

b. v_{AG} can license *-ko* or another case, whose realization is ϕ .

(I am deliberately not assigning a label (ACC, DAT) to *-ko*. It is used to mark dative arguments and others but as we have seen above it can also appear on other objects.)

3 Variable Case Marking of Subjects

What would the counterpart of Differential Object Marking for subjects look like?

3.1 Not Split Ergativity

Aissen (2003) in her discussion of Differential Object Marking draws a parallel between DOM and the differential marking of marked subjects (see Aissen (1999)).

Instances of Split Ergativity might seem relevant here but will not be the focus of discussion.

3.1.1 Tense/Aspect Based Splits

(3) Hindi-Urdu

a. Perfective \rightarrow Ergative Subject

Aruna-ne gaanaa gaa-yaa
Aruna.f-Erg song.m sing-Pfv.MSg

'Aruna sang a song.'

b. Non-Perfective \rightarrow Nominative Subject

Aruna gaanaa gaa-egii
Aruna.f song.m sing-Fut.3FSg

'Aruna will sing a song.'

- once the aspect is fixed, there is no variability in subject case.

- case-marking in such cases does not have interpretive consequences (beyond the tense/aspect difference).

3.1.2 Splits Conditioned by Person and Tense/Aspect

(4) Marathi

ASPECT	PERSON	NUMBER	
		<i>singular</i>	<i>plural</i>
Non-perf	1	mī	āmhī
Perf	1	mī	āmhī
Non-perf	2	tū	tumhī
Perf	2	tū	tumhī
Non-perf	3	to/tī/te	te
Perf	3	tyā-ne, ti-ne	tyā-nī

- Ergative and nominative are distinguished only in the third person (also the case in Punjabi).

- But despite of overt morphological syncretism with the nominative case, first and second person perfect subjects in Marathi/Punjabi do not agree with the verb.

- (5) a. **mī** **sītā-lā** **bagha-to**
 I-MASC-NOM Sītā-FEM-ACC see-PRES-MASC-SG
 'I see Sita.'
- b. **mī** **ek chimṇī** **baghit-lī**
 I-MASC-ERG one sparrow-FEM-NOM see-PRES-FEM-SG
 'I saw a sparrow.'
- c. **mī** **sītā-lā** **baghit-la**
 I-MASC-ERG Sītā-FEM-ACC see-PERF-NEUT-SG
 'I saw Sita.'
- (from Deo and Sharma (2002))

This suggests that the split may be a 'surface' split (see Woolford (2006b) for further discussion).

- case-marking in such cases does not have interpretive consequences (beyond the difference in person).

3.2 Three Instances of Variable Case Marking of Subjects

The cases discussed here involve subjects of infinitival clauses but the phenomenon is more general and is also found with subjects of other non-finite clauses such as those involving the *V-te hii* 'as soon as V' morphology and the *V-ke baad* 'after V' morphology.

3.2.1 Subjects of Gerunds

Ordinarily the subject of a gerund gets genitive case:

- (6) [mariiz-*(kaa) yeh davaai pii-naa] zaruurii hai
 patient-Gen this medicine drink-Inf necessary be.Prs
 'The patient's drinking this medicine is necessary.'

but in certain environments, we find variable case marking

- (7) Variable Case Marking: choice between genitive *-kaa* and ϕ
- a. animate proper name subject: genitive *-kaa* is obligatory
[Nira-*(**kaa**) kal aa-naa] zaruurii hai
Nira-Gen tomorrow come-Inf necessary be.Prs
'Nira's coming tomorrow is necessary.'
- b. inanimate subject: genitive *-kaa* is optional
[peṛ-**kaa**/peṛ kal kaṭ-naa] zaruurii hai
tree-Gen/tree tomorrow cut_{unacc}-Inf necessary be.Prs
'The tree's being cut tomorrow is necessary.'
- c. non-referential subject: genitive *-kaa* is not allowed
[is saal baarish/*baarish-**kaa** ho-naa] zaruurii hai
this year rain/rain-Gen be-Inf necessary be.Prs
'It is necessary that it rain this year.'

(initial observation is due to Hook (1979):132-133)

3.2.2 Infinitival Complements of the Permissive

- related discussion in Butt (1995)

Ordinarily the subject of the infinitival complement of the permissive gets *ko*-marking:

- (8) doctor-ne [mariiz-*(**ko**) zahar pii-ne] di-yaa
doctor-Erg patient-KO poison drink-Inf let-Pfv
'The doctor let the patient drink poison.'

but variable case marking shows up in certain contexts:

- (9) Variable Case Marking: choice between genitive *-ko* and ϕ
- a. animate proper name subject: *-ko* is obligatory
Nira-ne [Mohan-*(**ko**) aa-ne] di-yaa
Nira-Erg Mohan-KO come-Inf let-Pfv
'Nira let Mohan come.'

- b. inanimate subject: *-ko* is optional

Mina-ne [per-ko/per kaṭ-ne] di-yaa
 Mina-Erg tree-KO/tree cut_{unacc}-Inf let-Pfv
 'Mina let the tree (be) cut.'

- c. non-referential subject: *-ko* is not allowed

parmeshwar-ne [zalzalaa/*zalzale-ko ho-ne] di-yaa
 God-Erg earthquake/earthquake-KO be-Inf let-Pfv
 'God let there be an earthquake.'

3.2.3 Infinitival Complements of Modals

- initial observations in Masica (1990)

Ordinarily the subject of an infinitival complement of a modal gets *ko*-marking:

- (10) [mariiz-*(ko) yeh davaai pii-nii] caahiye thii
 patient-KO this medicine.f drink-Inf.f necessary be.Pst.f
 'The patient should have drunk this medicine.'

but once again, we find variable case marking:

- (11) Variable Case Marking: choice between genitive *-ko* and ϕ

- a. animate proper name subject: *-ko* is obligatory

[Nira-*(ko) kal aa-naa] caahiye thaa
 Nira-KO yesterday come-Inf should be.Pst
 'Nira should have come yesterday.'

- b. inanimate subject: *-ko* is optional

[per-ko/per kal kaṭ-naa] caahiye thaa
 tree-KO/tree tomorrow cut_{unacc}-Inf should be.Pst
 'The tree should have been cut yesterday.'

- c. non-referential subject: *-ko* is not allowed

[is saal baarish/*baarish-ko ho-nii/*ho-naa] caahiye thii/*thaa
 this year rain.f/rain.f-KO be-Inf.f/Inf should be.Pst.f/*be.Pst
 'It should have rained this year.'

4 Passivization and Promotion

4.1 Testing for Promotion

Determining whether promotion has taken place in a Hindi-Urdu passive is tricky.

Case morphology is unhelpful - T^0 and v_{AG} can both license a case realized by ϕ .

And agreement doesn't help either because of the existence of object agreement:

- (12) a. Perfective transitive, Ergative Subject, Object Agreement:

Ram-ne **yeh** **tehnii** kal **kaat-ii** **thii**.
Ram-Erg this branch.f yesterday cut-Pfv.f be.Pst.f
'Ram had cut this branch yesterday.'

- b. Non-Perfective transitive, Nominative Subject, Subject Agreement:

Ram yeh **tehnii** kal **kaat-egaa**
Ram.M this branch.f tomorrow cut-Fut.3MSg
'Ram will cut this branch tomorrow.'

Thus we do not know whether *yeh tehni* 'this branch' in (13) is a subject (case-licensed by T^0) or an object (case-licensed by the passive v_{AG}).

- (13) Passive:

yeh **tehnii** kal **kaat-ii** **gayii** **thii**.
this branch.f yesterday cut-Pfv.f Pass.Pfv.f be.Pst.f
'This branch was cut yesterday.'

We could go with Burzio's generalization and assume that promotion must be taking place despite the paucity of clear indicators. But...

- The subject of a passive can be *-ko*-marked.

- (14) a. DOM allows for *-ko* on Direct Object (compare with 12a):

Ram-ne **is** **tehnii-ko** kal **kaat-aa** **thaa**.
Ram-Erg this branch.f-KO yesterday cut-Pfv.MSG be.Pst.MSG
'Ram had cut this branch yesterday.'

- b. Passive with *-ko* retention:

is **tehnii-ko** kal **kaat-aa** **gayaa** **thaa**
this.Obl branch-Acc yesterday cut-Pfv.Default Pass.Pfv.Default be.Pst.Default
'The branch was cut yesterday.'

T^0 does not license *-ko* \rightarrow **no promotion**

Predictions:

- (19) In an infinitival clause - where there is no finite T^0 -
- a. *-ko*-marked passive subject
→ should be fine, not licensed by T^0

 - b. ϕ -marked Proper Name/1st/2nd pronominal passive subject
→ should not be possible, licensed by T^0

 - c. Other ϕ -marked passive subjects

if ok → promotion is not obligatory
if not ok → promotion is obligatory

4.2 Subject Case in Passive Infinitives

In the earlier discussion of infinitives, we have seen that their subjects in Hindi-Urdu can be:

- (20) a. PRO
b. marked with *-kaa* 'GEN' or *-ko*
c. ϕ marked for subjects of unaccusatives

With passives, we find the following.

- (21) *-ko*-marked passive subjects are generally possible in infinitives:
- a. [**per**-*ko* is tarah-se kaaṭ-aa jaa-naa] sharam-kii baat hai
tree-KO this.Obl way-in cut-Pfv Pass-Inf shame-Gen.f thing.f is
'For the tree to be cut down like this is a matter of shame.'

 - b. [**Rina**-*ko* bazaar-me dekh-aa jaa-naa] sharam-kii baat hai
Rina-KO market-in see-Pfv Pass-Inf shame-Gen.f thing.f is
'For Rina to be seen in the market is a matter of shame.'
- (22) ϕ -marked subjects of passive infinitives are only possible:
- a. with DPs that don't need *-ko* as regular direct objects:
[**per** is tarah-se kaaṭ-aa jaa-naa] sharam-kii baat hai
tree this.Obl way-in cut-Pfv Pass-Inf shame-Gen.f thing.f is
'For the tree to be cut down like this is a matter of shame.'

- b. but not with DPs that need *-ko* as regular direct objects:
 [***Rina** baazaar-mē dekh-aa jaa-naa] sharam-kii baat hai
 Rina.f market-in see-Pfv Pass-Inf shame-Gen.f thing.f is
 ‘For Rina to be seen in the market is a matter of shame.’

(22a) shows that promotion is not forced.

(22b) is out because for DOM reasons, promotion is forced but there is no T^0 to license case.

To complete this paradigm, we note that object that cannot be *-ko*-marked in the first place cannot be *-ko*-marked in the passive either, finite or infinitival

- (23) a. Yunus **mehnat**/***mehnat-ko** kar rahaa hai
 Yunus.m hardwork.f/hardwork.f-KO do Prog.MSg be.Prs.3Sg
 ‘Yunus is working hard.’

- b. Finite Passive:

mehnat/***mehnat-ko** kii jaa rahii hai
 hardwork.f/hardwork.f-KO do.Pfv.f Pass Prog.f be.Prs.3Sg
 ‘Hardwork is being done.’

- c. Infinitival Passive:

[**mehnat**/***mehnat-ko** naa kiyaa jaa-naa] sharam-kii baat hai
 hardwork.f/hardwork.f-KO Neg do-Pfv Pass-Inf shame-Gen.f thing.f be.Prs.3Sg

Finally, we note that genitive marking on the subject of a passive is a possibility in all and only those cases where *-ko*-marking was an option.

- (24) a. Proper Name/Pronominal Passive Subject: genitive *-kaa* ok

[**Rina-kaa** bazaar-me dekh-aa jaa-naa] sharam-kii baat hai
 Rina-GEN market-in see-Pfv Pass-Inf shame-Gen.f thing.f is
 ‘For Rina to be seen in the market is a matter of shame.’

- b. Referential Non Proper Name/Pronominal Passive Subject: genitive *-kaa* ok

[**per-kaa** is tarah-se kaat-aa jaa-naa] sharam-kii baat hai
 tree-GEN this.Obl way-in cut-Pfv Pass-Inf shame-Gen.f thing.f is
 ‘For the tree to be cut down like this is a matter of shame.’

- c. Non-Referential Passive Subject: **genitive -kaa not ok**

[***mehnat-kaa** naa kiyaa jaa-naa] sharam-kii baat hai
 hardwork.f-GEN Neg do-Pfv Pass-Inf shame-Gen.f thing.f be.Prs.3Sg
 ‘For hardwork to not be done is a shameful thing.’

5 Variable Case Assignment

What are the sources of the two possible cases that we can appear on the subject in variable case environments?

5.1 The Overt Case

- (25) a. *-kaa* in the gerund:
the high nominal layer in the gerund
- b. *-ko* in the complement of a permissive/modal:
(a head associated with) the permissive/modal

- under this conception, the *-ko* case is an instance of ECM.

- the predicates involved do not license *-ko* on their subjects.

Suggestive evidence: variants of the permissive verb *de* 'let' and the modal *caahiye* 'should' license *-ko*.

- (26) a. permissive *de* 'let' is homophonous with *de* 'give':
Nina-ne Mina-ko kitaab di-i
Nina-Erg Mona-KO book.f give-Pfv.f
'Nina gave a book to Mona.'
- b. *caahiye* 'should' is homophonous with *caahiye* 'want/need':
Ram-ko yeh kitaab caahiye
Ram-KO this book want/need
'Ram wants/needs this book.'

The Overt Case is licensed by heads outside the core infinitival clause. Henceforth I will also refer to it as the External Case.

5.2 The Covert Case

This is the tricky one.

5.2.1 Case and Licensing of Overt Subjects

Ordinarily, for the subject of the infinitival to be overt, it needs to be overtly case-marked.

- (27) [mariiz-*(kaa) yeh davaai pii-naa] zaruurii hai
 patient-Gen this medicine drink-Inf necessary be.Prs
 'The patient's drinking this medicine is necessary.'

In the absence of an overt case-marker, the subject has to be null.

- (28) a. no case-marker, overt subject: *
 *[Ram apnaa kaam acchii tarah-se kar-naa] acchii baat hai.
 Ram self.Gen work good.f way.f-Instr do-Inf good.f thing.f be.Prs.Sg
 *(For) Ram to do his work well is a good thing.'
- b. no case-marker, covert subject: ok
 [PRO apnaa kaam acchii tarah-se kar-naa] acchii baat hai.
 self.Gen work good.f way.f-Instr do-Inf good.f thing.f be.Prs.Sg
 'To do one's work well is a good thing.'
- c. overt case-marker, overt subject: ok
 [Ram-kaa apnaa kaam acchii tarah-se kar-naa] acchii baat hai.
 Ram-Gen self.Gen work good.f way.f-Instr do-Inf good.f thing.f be.Prs.Sg
 'Ram's doing his work well is a good thing.'

The facts in English are similar:

- (29) a. *[John to do his work well] is a good thing.
 b. [For John to do his work well] is a good thing.
 c. [PRO_i to do one's_i work well] is a good thing.

The general explanation given to these facts is as follows:

- (30) For an argument DP to be overt, it must have (structural) case.

5.2.2 Non-Overtly Case-Marked Infinitival Subjects

Given the above line of reasoning, the overt infinitival subject without a case-marker must have case.

But what could be licensing this case? And why is it only available in (31a) and not in (31b)?¹

- (31) a. *kaṭ* 'cut_{unacc}' is an unaccusative:
 [peṛ kal kaṭ-naa] caahiye thaa
 tree tomorrow cut_{unacc}-Inf should be.Pst
 'The tree should have been cut tomorrow.'
- b. *pii* 'drink' is a transitive:
 *[mariiz yeh kaarḥaa pii-naa] caahiye thaa
 patient-KO this potion.m drink-Inf.m necessary be.Pst.MSg
 'The patient should have drunk this potion.'

Proposal:

- The source for the case on the infinitival subject in (31a) is unaccusative *v*. Since the subject is merged VP-internally, it can be case-licensed by unaccusative *v*.

- (32) [... *v*_{unacc} [$\sqrt{\text{DP}}_{\text{subj}}$]]

- The subject in (31b) is merged in the specifier of transitive *v*. In this configuration, it is not c-commanded by transitive *v* and therefore cannot be case-licensed by it. To survive, it needs a higher case-licenser.

¹The relevance of argument structure shows that an analysis along the lines of Danon (to appear)'s proposal for Hebrew cannot be extended to the Hindi-Urdu facts. Danon argues that Hebrew indefinites do not need to be case-licensed. In Hindi-Urdu, indefiniteness is a necessary condition to get the 'unaccusative' case but it is not sufficient. Consider the following contrast:

- i. a. unaccusative:
 [caṭṭaan gir-naa] ajiib baat hai
 rock fall-Inf strange thing be.Prs.Sg
 'A/the rock's falling is a strange thing.'
- b. transitive:
 [caṭṭaan*(-kaa) gaarīi kucal-naa] ajiib baat hai
 rock-Gen car crush-Inf strange thing be.Prs.Sg
 'A/the rock's crushing the car is a strange thing.'

(i.a) and (i.b) have the same subject, but the ϕ -case option is only possible with the unaccusative. Thanks to Elena Bashir for pointing out the need for such a minimal pair and for providing me with a suitable example.

(33) [... [DP_{subj} [*v*_{AG} [√ DP_{obj}]]]]

- Handling Direct Objects: *v*_{AG} optionally licenses *-ko* and another head - lets call it *v*_{unacc} - licenses *φ*.

(34) a. Transitive: [... [DP_{subj} [*v*_{AG} [*v*_{unacc} [√ DP_{obj}]]]]]

Options for DP_{obj}: licensing by *v*_{AG} (*-ko*) or *v*_{unacc} (*φ*)

b. Passive: [... [*v*_{AG} [*v*_{unacc} [√ DP_{obj}]]]]

Options for DP_{obj}: licensing by *v*_{AG} (*-ko*), *v*_{unacc} (*φ*), or a higher licenser (T⁰, D⁰, ECM)

(the exact possibilities will depend upon the properties of the DP_{obj}/its structural position at the point the case algorithm applies.)

- note *v*_{AG} cannot license case on an externally merged specifier. Hence no DOM *-ko*-marked external arguments.

6 Licensing of Case by Unaccusative *v*

It is a widely-shared assumption that unaccusative *v* cannot license case. This assumption underlies Burzio's Generalization.

My attempt will be to show that the desirable effects that follow from this assumption follow from other aspects of the grammar. Therefore we do not need a primitive assumption to this effect, leaving the door open in principle to an analysis like mine which allows case-licensing by unaccusative *v*.

Why is (35b), the English counterpart of (35a), ungrammatical?

(35) a. [akhbaar waqt-par aa-naa] zaruurii hai
 newspaper time-on come-Inf necessary be.Prs
 '*The newspaper to come on time is necessary.'

b. *[The newspaper to come on time] is necessary.

In the context of my analysis, this question reduces to the following:

- (36) Why can v_{unacc} license case in Hindi-Urdu but not in English?

This could just be an instance of parametric variation but a deeper explanation seems possible.

6.1 The needs of T^0

Assumption: v_{unacc} can in principle assign case in all languages but whether it actually does so or not is determined by additional considerations (see Woolford (2006a) for a proposal in the same spirit).

- (37) a. English: T^0 always has an EPP/case feature.
b. Hindi-Urdu: T^0 optionally has an EPP/case feature.

In contrast to English, there is no conclusive evidence in Hindi-Urdu for a strong EPP:

- (38) a. No overt *there* expletive
b. Non-nominative subjects
c. Exception to Burzio's Generalization

If there is only one argument in a clausal structure:

- (39) a. English: the unique argument must enter into a relationship with T^0 .
- precludes entering into a relationship with v_{unacc}

b. Hindi-Urdu: the unique argument does not have to enter into a relationship with T^0 .
- a relationship with v_{unacc} is possible

6.2 Dependency and Surface Realization

German has been argued to lack a strong EPP feature (see Bobaljik and Wurmbrand (2005)) but it patterns with English and not Hindi-Urdu.

We could appeal to the need of T^0 to license nominative but even that would not work because German allows for impersonal passives.

An alternate explanation makes reference to the notion of dependent case (Marantz (1991)).

- (40) a. German: case licensed by v (v_{unacc} or v_{ag}) is dependent.
b. Hindi-Urdu: case licensed by v (v_{unacc} or v_{ag}) is not dependent.
- (41) Connection with surface form:
a. German: surface form of case licensed by $v \neq$ surface form of case licensed by T^0
b. Hindi-Urdu: surface form of case licensed by $v =$ surface form of case licensed by T^0

Speculation: connection between surface distinctness of case-licensed by v and case-licensed by T^0 and dependency of case licensed by v .

Possibly the motivation behind ‘dependency’ is that the extra encoding typically involved in the accusative is unnecessary when only one argument is around. But when the accusative does not have extra encoding (across the board) the motivation disappears.

- Icelandic vs. Faroese?

- congruence with the idea that Burzio’s generalization is in fact independent of the thematic properties of verbs and is actually connected to the idea that the unmarked/higher case (i.e. nominative) is preferred over the marked/lower/dependent case (i.e. accusative) (see Marantz (1991), Woolford (2003), Bobaljik (2005)).

7 Connections with Interpretation

We have already seen that:

- (42) a. The properties of the subject DP (pronoun/name vs. non-pronoun/name; referential vs. non-pronoun) influence the choice between case licensed by v_{unacc} and case-licensed higher (*-ko* and genitive *-kaa*).
- b. To a first approximation when a choice exists, the presence of the case-licensed higher (genitive *-kaa* and *-ko*) correlates with a specific interpretation.

- i. *-kaa* present on subject → only specific interpretation:

[yahā: **paisō-kaa** mil-naa] mushkil hai
 here money-Gen find_{unacc}-Inf difficult be.Prs
 ‘Finding **the** money here is difficult.’

- ii. *-kaa* absent → non-specific interpretation available:

[yahā: **paise** mil-naa] mushkil hai
 here money find_{unacc}-Inf difficult be.Prs
 ‘Finding/Getting **money** here is difficult.’

(Peter Hook, p.c.)

An initial proposal:

There are considerable parallels between the interpretive effects of Variable Case Marking on subjects and DOM. I propose an analysis that covers both cases:

- (43) a. Pronouns and Proper Names must leave the VP for reasons of interpretation (in the spirit of Diesing (1992)). At the point at which case-assignment takes place, they are not in the c-command domain of v_{unacc} . Hence only the case-licensed higher is an option.

(This means that case-assignment does not take place very early.)

- b. Specific interpretations also involve movement out of the VP. This is behind the correlation between the case-licensed higher and specific interpretations.
- c. DPs that are non-specific/non-referential must be VP-internal at the level at which case is assigned. Thus they can receive case from v_{unacc} . Presumably locality considerations block them from receiving the higher case while remaining VP-internal (see Dayal (2003)).

- of course, to the extent that the interpretive effects of variable case marking on subjects and DOM diverge and there is some evidence pertaining to number neutralization that suggests that they do, the above proposal needs modification.

8 The structural location of *-ko* marked Direct Objects

We assumed above that *-ko*-marked direct objects move out of the VP. There is independent evidence for this assumption.

8.1 Control into Adjuncts

-ko-marked direct objects are able to control the PRO subject of certain non-finite adjuncts. *-ko*-less direct objects are unable to do this.

(44) (subject can always control into the adjunct)

- a. object is *-ko*-marked: object can control the PRO subject of the adjunct

Mina- ne_i bazaar-me **ek** **sailaani- ko_j** [$PRO_{i/j}$ naacte-hue/apnii kamiiz
 Mina-Erg market-in a/one tourist-KO dancing-while/self.Gen.f shirt.f
 utaarte-hue] dekh-aa
 taking.off-while see-Pfv

'In the market, Mina saw a tourist dancing/while she was dancing/taking off his shirt/while she was taking off her shirt.'

- b. object is not *-ko*-marked: object cannot control the PRO subject of the adjunct

Mina- ne_i bazaar-me **ek** **sailaani $_j$** [$PRO_{i/???j}$ naacte-hue/apnii kamiiz
 Mina-Erg market-in a/one tourist-KO dancing-while/self.Gen.f shirt.f
 utaarte-hue] dekh-aa
 taking.off-while see-Pfv

'In the market, Mina saw a tourist while she was dancing/???dancing/while she was taking off her shirt/???taking off his shirt.'

- if *-ko*-marked direct objects are structurally higher than non *-ko*-marked direct objects, the contrast in (44) is reducible to whether the direct object c-commands the adjunct or not. To fully work out this idea though, we need to decide where the adjunct and the verb are located structurally.

8.2 Object Shift

-ko marked Direct Objects in Hindi undergo obligatory object shift to a Subj-IO medial site (cf. Bhatt and Anagnostopoulou (1996)).

- (45) a. Ram-ne Anita-ko chitthii bhej-ii
 Ram-ERG Anita-KO letter.f send-Pfv.f
 'Ram sent the letter to Anita.'
- b. Ram-ne chitthii-ko_i Anita-ko t_i bhej-aa
 Ram-ERG letter-KO Anita-KO send-Pfv
 'Ram sent the letter to Anita.'
- c. #Ram-ne Anita-ko chitthii-ko_i bhej-aa
 Ram-ERG Anita-KO letter-KO send-Pfv
 '#Ram sent Anita to the letter.'
 (NOT: Ram sent the letter to Anita.)

The oddness of (45c) has been taken to show that 'two *-ko* marked NP's cannot appear in a sentence.' (cf. Mohanan (1994), Kidwai (2000):78-80).

When the DO is a pronoun that refers to a human, it must be *-ko* marked → object shift is forced.

- (46) *vo* 'Dem' i.e. he/she/it/that
- a. Yusuf-ne Nina-ko vo di-yaa
 Yusuf-Erg Nina-Dat Dem give-Pfv.m
 'Yusuf gave that/*him to Nina.'
- b. Yusuf-ne use/us-ko_i Nina-ko t_i di-yaa
 Yusuf-Erg Dem.Dat/Dem.Obl-KO Nina-Dat give-Pfv
 'Yusuf gave him/her/that to Nina.'

- The obligatory object shift suggests that *-ko*-marked direct objects are licensed in a position above the licensing position of Indirect Objects. This position is clearly above the merge position of Direct Objects, suggesting that *-ko*-marked DOs always move from their VP-internal merge position to a higher licensing position.

- It is possible that the same head might be responsible for licensing both the DOM *-ko* and the Dative *-ko*.

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