

Dependent Structural case and the role of functional projections.

A. Introduction: subject and object case in Hindi/Urdu:

Hindi/Urdu and many related languages of South Asia have a distinctive property in the morphological cases which mark subjects and objects¹. Subjects of many transitive (bivalent) verbs must have ergative case in finite perfective sentences. Direct objects of these verbs may have dative case if the direct object phrase has animate or specific reference, otherwise it has nominative case. Aissen 2003 shows that this differential object marking in Hindi/Urdu is determined primarily by animacy rather than specificity, a point to which I will return later in the paper. Both ergative subject and dative direct object are possible in the same sentence. Indirect objects have (lexical) dative case. In other verb types, arguments have lexical dative or locative case. All of these morphological cases are expressed in Hindi/Urdu with postpositions.

For the purposes of this paper, I am using the term *nominative* descriptively for unmarked case involving the direct rather than the oblique form of the nominal elements. Nominative constituents may trigger agreement either as subject or objects (or N in a complex –V predicate) depending on other cases present in the clause. I will be primarily concerned here with the morphological cases and their licensing.

The morphological case patterns of Hindi/Urdu and similar languages don't fall out easily from the case-licensing components of earlier theories such as Government and Binding (Chomsky 1981), which were better adapted to languages with nominative subjects and accusative direct objects. An interesting revision of G-B assumptions about morphological case was proposed by Marantz (1991), which sorted out various subtypes of case into a disjunctive hierarchy of cases with a wider scope than Burzio's Generalization, which is basically about intransitivity.

One motivation behind this proposal was to account for the complementarity of dative and ergative case on subjects in Georgian, depending on the tense information on the verb. Marantz' hierarchy is given in (1). One of principal innovations is the concept of 'Dependent structural case', case which reflects transitivity or other information such as tense/aspect.

1) Marantz 1991: Disjunctive hierarchy of case realization:

In this paper, I will retain the classification of morphological cases, particularly *lexical case* and *dependent structural case*, while offering an account of how cases can be licensed without dependence on the idea of Government (1b), now abandoned (Chomsky 1995). Assumption about Lexical case carry over: it is associated with specific predicates and specific theta roles or semantic notions. While not much is said about this kind of case within the Minimalist program, it seems to be a common assumption that Lexical case is checked at MERGE, when the arguments theta roles is discharged. (Chomsky 1995; Ura 2000). If so, then Lexical case is checked/licensed very early in syntactic derivation, retaining the priority which Marantz assigns to this category of case.

In this paper I will be discussing the licensing of dependent structure cases (DSC), ergative on subjects and dative on direct objects. The question will be how to represent their case-licensing conditions without depending on Government. Marantz' account of DSC requires distinct chains, suggesting distinct functional projections which check ERG subjects or DAT on direct objects. But the proposal for Hindi/Urdu must allow for both ERG and DAT to be present in one clause, unlike the requirement in Georgian (and as we will see, in an Indic language) that there be an exclusive disjunctive relation, either ERG or DAT but not both.

B. Structural case on subjects and direct objects in Hindi/Urdu

Before proceeding to the proposal for case licensing in Hindi/Urdu, I give a number of examples of how the cases are used, showing the case combinations which are possible for subjects and direct objects. The summary is followed by sentence examples cross-referenced by example numbers in (2)

2) Summary of examples

Subject	Direct Object	Inflection on Verb
3) Nominative	Dative	Non-perfective (Impf, future)
4) Nominative	Nominative	Non-perfective (Impf, future)
5) Ergative	Dative	Perfective
6) Ergative	Nominative	Perfective
7) <i>Nominative</i>	<i>Nominative, dative</i>	<i>Perfective</i>
Lexical case*		

3) Nominative subject case triggering agreement, dative direct object:

a. *woo hameeN deekh rahaa hai*
3sm-nom we-dat see prog is
'*He is looking at us.*' (Bahri 318)

b. *tum usee . . . turant pahcaan jaa-oogee*
you-fam nom 3s-dat immediately recognize go-fut-you-fam
'*You will recognize him/her at once.*' (Bahri 382)

4) Nominative subject case, Nominative direct object

woo kaapiyaaN deekh-eegaa
3sm answer sheets see-fut
'*He will examine/look at (the) answer sheets*

In finite, perfective clauses, transitive subjects are normally ergative, and the direct object may be dative (5) or nominative (6). The combination in (5) is one of the central facts to be explained in this paper. A sentence of the type in (5) is not possible in Georgian.

5) Ergative subject, dative direct object (finite perfective clause)

us-nee hameeN deekh-aa (tak) nahiiN [Dative direct object]
3s-erg we-dat see-pf up-to not
'*He didn't (even) look at us.*' Bahri 1992 319

6) Ergative subject, nominative direct object (finite perfective clause)

*us-nee jiivan-meeN bahut kuch(*koo) deekh-aa hai* [Nominative object]
3s-erg life-in much some (*dat) see-pf is
'*He has seen much in life.*' (Bahri 318)

A small number of exceptional verbs may optionally or obligatorily lack ergative subjects yet retain dative direct objects (7).

7) a. *maiN-nee un-laRkooN-koo pahcaan-aa nahiiN*
I -Erg those boy-Pl-Dat recognize-Pf not
'*I didn't recognize those boys.*' (Optionally ergative subject; default agreement)

8) Lexical dative subject

Dative subject, nominative object

a. *mujhee*/*maiN-nee eek upaay *koo **suujh** gay-aa/*li-yaa (hai)
I-dat *I-erg one means-nom *dat see go-pf/ *take-pf (is)
'I saw/have seen a solution; a solution came/has come to my mind' (Bahri 1992.670)

b. *usee* apnaa doost **mil** ga-yaa
3s-dat self's friend meet go-pf
'He met his friend (by chance).'

9) Nominative subject, locative object --or dative subject, nominative object

woo/*nee apnee doost-*see*/*koo **mil** ga-yaa
3sm /*erg self's friend-with/*dat meet-go-pf
'He met his friend (by appointment).'

In (10), I summarize the 'Indic' case pattern:

10) Summary: Indic Case:

- a. NP-subj **-erg**/ nom NP-obj **-dative**/nom [Dependent structural case in **bold**]
- b. NP-subj-*dat* NP-obj- nom/***dative** [Lexical case in *italics*]
- c. NP-nom NP *-loc*

In the Appendix are some examples of this pattern of cases from in Panjabi, a split ergative language, and Kurmali, an Eastern Hindi language with invariant ergative subject marking.

C. Dependency in Hindi/Urdu

In this section, I will offer a syntactic structural representation which derives the relation between ergative subject case and dative direct object case. This relation can be summed up as a classical conditional sentence (11), which has the consequences in (12):

11) If ergative is possible on the subject, then dative is possible on the direct object.

- a. Ergative subject case is a sufficient condition for dative direct object case.
- b. Dative direct object case is a necessary condition for ergative subject case.

allowed by the semantics of the conditional. The results reflect both lexical variation in the language and the effects of verb combinations allowed in Hindi/Urdu.

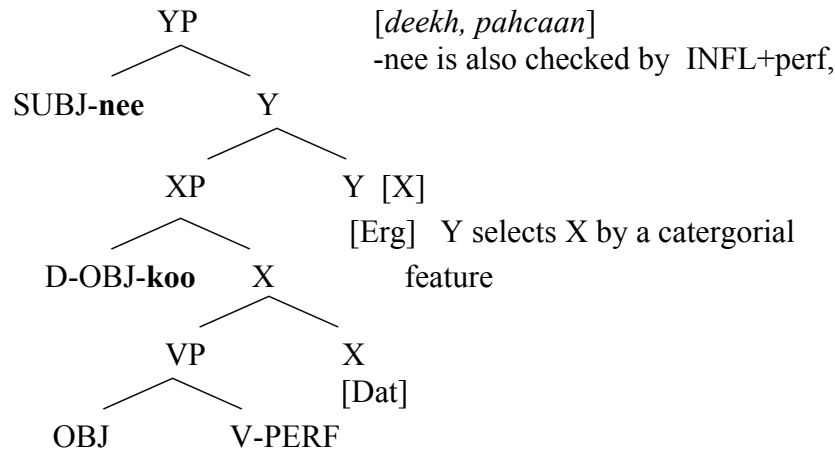
Taking Marantz' requirement for distinct chains, and the conditional relation in (11), I propose that the licensing conditions for DAT and ERG are represented on two functional heads which are projected above VP. I will call these heads X and Y, bearing case and categorial selection features. Later in the paper, I will offer some speculations about the categorial identity and semantic contribution of these heads.

The proposal is the following:

- 13) a. Dative direct object case is checked/licensed by X functional projection.
[Subject to animacy/specificity of reference]
- b. Ergative subject case is licensed/checked by Y functional projection
 [Subject to conditions on sentence inflection.]

In combination with VP, we derive the following projection for the majority of ergative subject verbs:

14) Structure of the VP projection:



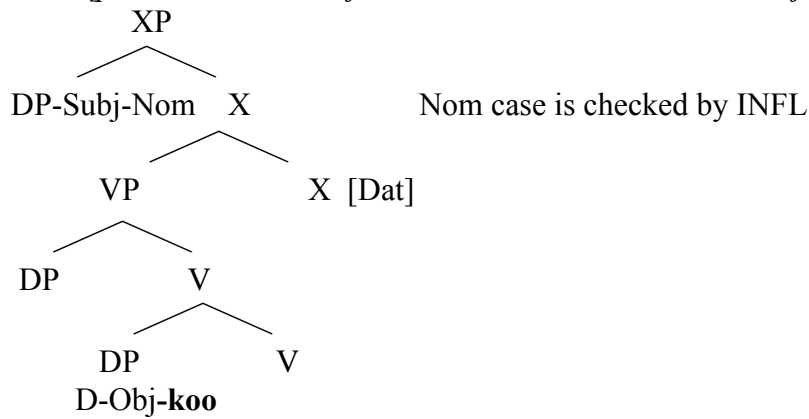
a. Lexical exceptions: Y lacks [Erg] *laa-naa* 'bring' *bool-naa* 'speak, say, talk'

The X head (optionally) bears the [Dat] case feature when it is merged with VP. This feature is checked by movement of DP-OBJ to specifier position of XP. The Y projection bears a

So far the X and Y projections are purely abstract, with no surface reflexes other than the cases they are intended to explain. Before offering some direct evidence, I want to offer arguments for assuming the presence of Y and Y, in order to explain the lexical variation in case uses in Hindi/Urdu, and the case variation which occurs in combinations of V and V.

I. The first argument is based on the presence in Hindi/Urdu of verbs which optionally or obligatorily lack ERG in perfective finite clauses, but retain DAT, such as *pahcaan-naa* ‘recognize’, *samajh-naa* ‘understand’. For this case combination, I propose that the non-ERG structure is (15):

15) VP projection [*pahcaan-naa, samajh-naa; dative DO, nominative subject*]



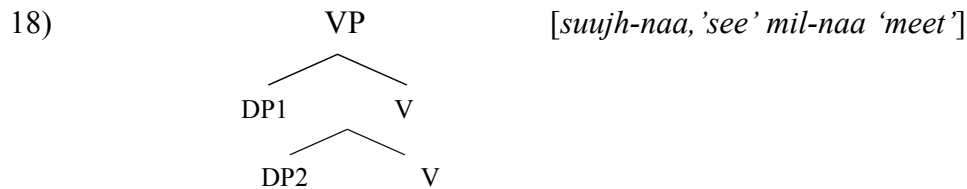
For speakers who allow both NOM and ERG subjects, I'll assume that the verbs have two verbal projections, both (14) and (15).⁴ The X projection is present in (15), allowing a dative direct object to be checked by movement as in (14). The subject has NOM case, checked in the INFL complex. The verbs in this class are not numerous, and seem to vary from speaker to speaker. Some speakers, the ERG version is required if there is an overt direct object (16a), otherwise the NOM subject is used. But other speakers allow a NOM subject with a dative direct object (16b).

16) a. *maiN-nee un-laRkooN-koo pahcaan-aa nahiiN*
 I -Erg those boy-Pl-Dat recognize-Pf not
 'I didn't recognize those boys'. (Optionally ergative subject)

b. *maiN un-laRkooN-koo pahcaan ga-yaa*

- 17) pahcan-naa ‘recognize/identify’
 samajh-naa ‘understand’, bhuul-naa ‘forget/make a mistake’
 haar-naa ‘lose’, jiiit-naa ‘win’

II. The second argument is based on a much more general class of bivalent verbs which allow neither ERG nor DAT, such as *suujh-naa*, ‘see’ *mil-naa* ‘meet’. For these verbs, I propose the bare VP projection (18), in which both the X and Y heads are omitted.



Verbs of this type fall into two large classes, those which have a lexical case DAT on DP 1, or a locative case on DP2] (Davison, forthcoming)

- 19)a. *mujhee*/*maiN-nee eek upaay *koo **suujh** gay-aa/*li-yaa (hai)
 I-dat *I-erg one means-nom *dat see go-pf/ *take-pf (is)
 ‘I saw/have seen a solution; a solution came/has come to my mind’ (Bahri 1992.670)

- b. *woo*/*nee apnee doost-see/*koo **mil** ga-yaa
 3sm /*erg self’s friend-with/*dat meet-go-pf
 ‘He met his friend (by appointment).’

The lexical representation of these verbs associates an obligatory lexical case with one of the two arguments. This obligatory property is evidence of the presence of a lexical case (feature) on the verbal head. In my proposal, the presence of lexical case is enough to rule out a possible projection by merger with an X or Y head. Lexical case, we assume, is checked early, at MERGE, and this fact derives the priority of lexical case in Marantz’ hierarchy.

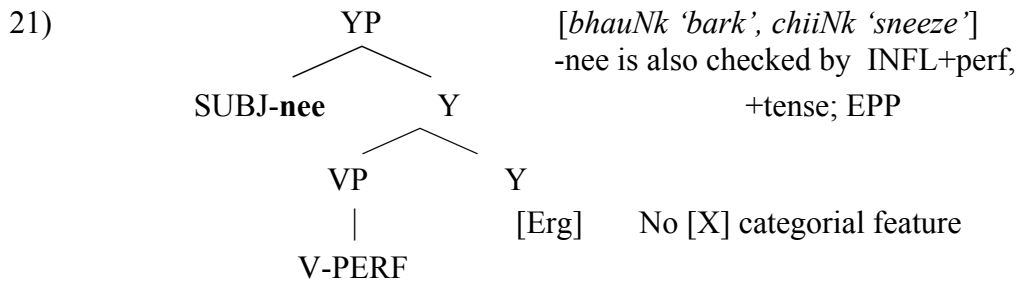
III. Lexical exceptions involve stipulations associated with specific verbs. A very small number of bivalent verbs prohibit any use of ergative case at all. These verbs are *laa-naa* ‘bring’ (20a), and *bool-naa* ‘say, speak’ (20b), which freely allow dative direct objects:

- 20) a. *mujhee ummid nahiiN thii* [ki meeraa mitr ...*mujhee* aisee ghaTiyaa hooTal-meeN
 I-dat hope not was that my friend I-DAT such inferior hotel -in

3s this lie-dat not say-pf
 ‘He hasn’t told this lie (though he has told other lies.)’

This kind of lexical exception involves the full verbal projection (14) but with the lexical stipulation that Y may not bear the feature [Erg] (however this may be represented).

The second class of lexical exception also involves a small class of *intransitive* verbs which may optionally have ergative subjects. For this class, I propose that the lexical exception is expressed as the possibility of Y alone being projected optionally without the [X] categorial selection feature:



The conditional statement in (11) is not violated, in that there is no direct object whose case is determined. The class of verbs which has this option is quite odd, including *bhauNk-naa* ‘bark’ as well as some verbs of bodily function *khaaN-s-naa* ‘cough’ (see Davison 1999 for a more or less exhaustive list from Hindi/Urdu and other Indic languages). From verbs there are cognate nouns like *khaaN-sii* ‘chronic cough’, but not **bhauNk*. The verbs seem not to include unaccusatives, but some are semelfactives (Smith 1997), verbs referring to a single instantaneous event like ‘knock’.

IV. In addition to the basic variation in lexical verbs with respect to case arrays, there are also variations of subject case in V-V. Ergative case may be disallowed without affecting dative direct object case. Auxiliary verbs such as *sak-naa* ‘be able’ combine with a bare main verb (22a), and main verbs may combine with ‘vector’ verbs such as *baiTh-naa* lit. ‘sit’ (22b):

- 22)
- a. woo/ * us-nee hameeN deekh nahiiN sak-aa [Dative direct object]
 3s-nom 3s-erg we-dat see- not be.able-pf
 ‘He **wasn’t able** to look at us.’
 [Auxiliary verbs in combination with the main verb]

The vector verb is a lexical verb which occurs independently, but in combination it adds some adverbial or pragmatic meaning (Hook 1974). In this case it conveys that the event occurred inadvertently and should have been avoided. If the vector verb is normally an ergative subject verb such as *dee-naa*, it combines with an ergative subject main verb and the subject case is ergative. For some speakers, the ergative subject case is possible only if both V are specified for [Erg], for others just the right-most V is [Erg]]. In V-V combination Y may have its [Erg] feature cancelled, without affecting the direct object marking.⁶ I will return to this question of the influence of vector verbs in the last section of the paper.

Summary of lexical variation.

To account for the ERG-DAT dependency, I have proposed a basic verbal projection which represents the case features on two functional projections over VP, an X projection which licenses dative direct object case and a Y projection which licenses ERG case. This combination of case-licensing projections accounts for the lexical variation in Hindi/Urdu. Both X and Y are precluded by lexical case on one of the arguments within VP. If no lexical case is present on the VP, then X and Y are projected, with X selected by a categorial feature on Y. Some exceptional verbs may alter the possibilities for ERG on the subject *without* affecting the possibilities for DAT on the direct object--either ERG is absent or Y itself is absent. Y alone may be selected by a small class of intransitive verbs, in the absence of an object.

E. What kind of language similarities and variation are possible?

Many Indic languages have similar case selection properties as Hindi/Urdu. Hindi/Urdu case distributions resemble what is found in Punjabi (Bhatia 1993), which has split ergative case, some lexical exceptions without ergative subjects, verbs with lexical case, and a small number of exceptional intransitive verbs (Appendix). A similar distinction between languages with ERG-DAT combinations versus lexical case is found in Kurmali (Mahto 1989). This language, spoken in Orissa, is an 'Eastern Hindi' language with ergative subject marking in all tenses (Appendix).⁷

Additional support for the proposal offered here comes from an Indic language, Kashmiri, which has ergative subjects and dative direct objects, but selected differently from what is possible in Hindi/Urdu. In Hindi/Urdu, a sentence may have *both* an ergative subject and a dative direct object (5), but in Kashmiri, these cases are in complementary distribution. [Wali and Koul 1997, Bhatt 1999].

Koul 2002 than is available in this paper. A fact which may be a consequence of this account of case licensing for the object is an observation by Bhatt (1999) that nominative objects in non-perfective clauses (those which can have ergative clitics) cannot be preposed higher in the clausal projection. The clitic agreement with the X projection feature may freeze movement in some way.

There are some further consequences in Kashmiri, with respect to what kind of lexical variation is possible. First, Kashmiri has no exceptional transitive verbs with optional or absent ergative case but with dative direct objects (K. Wali, p.c.), like *pahcaan-naa* ‘recognize’ in Hindi/Urdu. Second, there are no auxiliaries like HU *sak-naa* ‘be able’ which suppress the ergative on the subject. (O.N. Koul, P. Hook, p.c.). In the sentences in (29), Hindi/Urdu is contrasted with Kashmiri, which allows only an ergative subject for an ergative subject verb combined with ‘be able’:

29) a. [Hindi/Urdu]
 woo/*us-nee kaam nahiiN kar sak-aa
 3s-nom/3s-erg work not do be.able-pf
 ‘He could not do the work.’

b. [Kashmiri]
 temy (*su) hyec-ni keem ker-yith
 he.Erg (he.Nom) could-not work do-CP
 ‘He could not do the work.’ (P. Hook, p.c.)

Third, Kashmiri has no compound V-V verbs where what is normally an ergative subject has to be nominative, but the direct object is still dative (O.N. Koul, P. Hook pc)

(30)a. [Hindi] V(+Erg) + Vector Verb (-Erg)
 maiN/*maiN-nee [us.ko deekh-tee hii] **pahacaan gayaa**
 I-nom I-erg him-dat see-ing Emp recognize go-pf
 [ki woo badmaash hai
 that he scoundrel is

‘[As soon as I saw him] I could tell he was a scoundrel.’ (Hook and Koul 1991)

b. [Kashmiri] V (+Erg) + Vector Verb (-Erg) is ungrammatical
 *[vuch.yith-iy] **goos bi prazineev-yith**
 seeing-Emp WENT I-nom recognize-CP

seeing-emp recognized-1sErg that he-nom is scoundrel
'[As soon as I saw him] I recognized [that he is was a scoundrel.]' (Ibid)

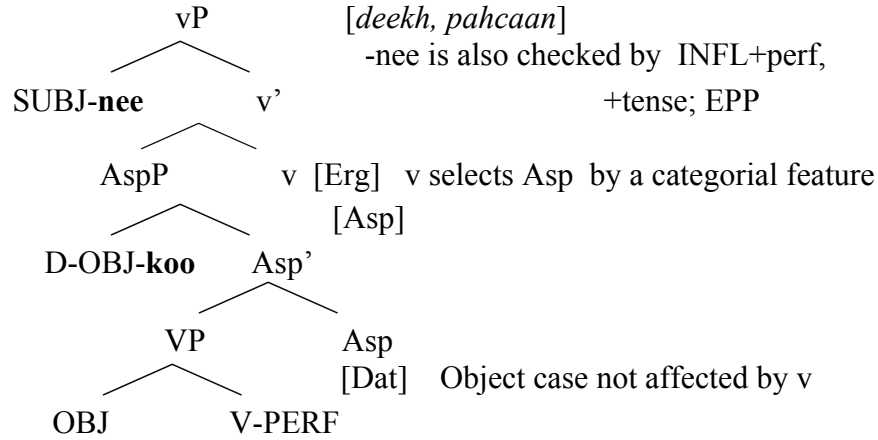
If a case clash exists in the V-Vector V combination in Kashmiri, the V-V combination cannot be used. While Hindi/Urdu has a rather large number of verbs which can be used as vector verbs in combination with V (Nespital 1997), the use and number of vector verbs is much more restricted in Kashmiri.

Finally, Kashmiri, like Hindi/Urdu and Punjabi, has a small number of irregular intransitive verbs with optional ergative case (Wali and Koul 1997). As in Hindi/Urdu these verbs can be analyzed as lexical exceptions which optionally select the Erg/dat feature on the Y projection alone, as no object is involved.

In this and the previous sections, I have argued for two independent functional heads which have case and categorial features which license ergative and nominative case, and express the dependency between these cases in Hindi/Urdu. If [Erg] is possible in the projection introducing the subject, then [Dat] differential case marking is possible for direct objects with animate or specific reference. Within Hindi/Urdu, there is language specific evidence for these two heads, found in the lexical variation among verbs, and the variability of subject case in V-V combinations. Some verbs allow dative objects, but may or may not have ergative subjects, other verbs may not have ergative subjects at all, which I have presented as differences of case features on the upper subject projection. Two large classes of verbs allow neither ergative subjects nor dative objects, but instead have lexical case associated with the subject or the object. Lexical case precludes the presence of the functional heads which license structural cases, ergative and dative.

Kashmiri has both ergative subjects and dative direct objects, like Hindi/Urdu, but with a major difference. These cases are in complementary distribution, suggesting that the case features are closely linked and cannot be checked independently. The ergative agreement clitic occurs with direct objects not overtly marked with dative object case. I retain the same functional heads proposed for Hindi/Urdu, as the case patterns for Kashmiri seem to be substantially the same as for other Indic languages. The difference I propose is just that in Kashmiri, the case features are fused. This one difference explains subtle differences between the two languages. Kashmiri does not have verbs of the kind found in Hindi/Urdu which allow dative direct objects but do not have ergative case. Kashmiri also does not require ergative case to be absent when a nominative subject auxiliary or vector verb is present in combination with a verb ordinarily taking an ergative subject. Both languages have exceptional intransitive verbs, selecting only

31)



32) a. X = Verbal aspect

Bears semantic features specifying events +/- Dynamic [Smith 1997]
Object case feature -dependent structural dative

b. Y = v 'light' verb

Bears semantic features specifying events +/- Durative
Licenses Erg case (in conjunction with finite perfective inflection)

If the Asp and light v heads contribute aspectual features, then they have a motivation beyond mere case licensing, the problem with AGR in earlier versions of the Minimalist Program. Here I offer some independent justification for these aspectual features. These comments must remain speculations because at present the full array of information about the aspectual content of verbs in Hindi/Urdu is not available.

There is some evidence, however, that lexical verbs in Hindi/Urdu are underspecified for aspect, compared with their translation equivalents in English. I'll propose that the functional heads within the verbal projection contribute the following features (based in part on Smith 1997):

33)

Features	States	Activities	Achievements	Accomplishments	
Dynamic	-	+	+	+	=ASP
Durative	+	+	-	+	=v

I use Dynamic where Smith uses Static: the +Dyn value refers to the unfolding sequence of

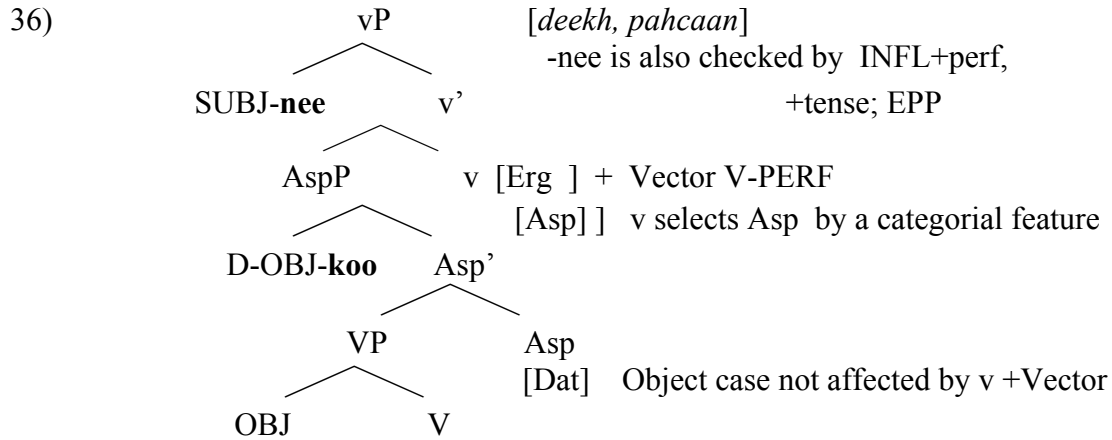
- a. *khooj-naa* ‘search, investigate’ +Durative ‘find’ -Durative (see examples in Nespital 1997:325)¹⁰
- b. *pahcaan-naa* ‘identify’ +Durative ‘recognize’ -Durative
- c. *pahan-naa* ‘wear’ -Dyn ‘put on’ +Dyn
- c. *kar-naa* ‘do’ -telic ‘make’ +telic
- d. *samajh-naa* ‘understand’ -Dynamic, +Durative ‘come to understand’
+Dynamic, -Durative
- e. *bhuul-naa* ‘make a mistake’ +Durative ‘forget’ -Dynamic

Lexical entries of such verbs do not specify them as +/- telic. Telicity is guaranteed by two syntactic factors. The factor of interest here is the presence of a vector verb linked with the main verb, the same combination which has an effect on ergative subject case in (22).¹¹ The vector verb *lee-naa* ‘take’ adds a telic interpretation to *khooj-naa* in (35) (see also note 5).

35) a. us-nee aNdheeree-meeN bhii TaTool-kar apnii cappal *khooj lii*
3s-erg darkness-in even grope-prt self’s sandal search take-pf

aur usee pahan-kar aa ga-yaa
and 3s-dat wear-pf come go-pf
‘He groped in the darkness and *found* his sandal, and putting it on, he came out.
Nespital 1997:325.

I will assume that vector verbs are attached at v, as in (36)



In this position, the vector verb is able to affect the subject case feature, as we saw above in

English, in which the properties of the object DP lower down in the verbal projection determine a telic interpretation (Travis to appear).¹³

Specification of telicity by the attachment of a vector verb has no effect on object case. This fact makes sense if as Aissen 2003 proposes, the dative *-koo* marker in Hindi/Urdu is primarily a marker of animacy, not specificity, though it is also felicitous with specific reference. It is possible though not required to mark the direct object as specific or quantized to get a telic reading. Persian seems to be in strong contrast to Hindi/Urdu, as the marker *-ra* is required to mark definiteness or specificity.

H. Conclusion

Hindi/Urdu as well as many of the other Indic languages has different lexical classes of verbs distinguished by different case arrays. There is a common ‘Indic’ pattern of case selection for subjects and object. Some bivalent verbs require a lexical case on either the subject or the direct object, others require ergative case on the subject. Ergative subject verbs may have dative-marked direct objects, and this correlation represents a one-way conditional relation between ergative and dative case, both of which are dependent in that they are associated with transitivity (Marantz 1991), and with a particular subclass of bivalent verbs. The choice of dative over nominative for direct objects depends on the animacy or specificity of the object referent, differential object marking. In Hindi/Urdu verbs of this type are subject to certain kinds of lexical and syntactic variation. Dative object case is possible even when ergative subject case is absent, and ergative subjects are possible when there is no object, for a small class of exceptional verbs.

This pattern is found in other Indic languages with the same sort of variation, but Kashmiri is different in a specific way. In this language, very little lexical or syntactic variation is found. I have derived this fact from another property of Kashmiri, the fact that Ergative and Dative case are in complementary distribution. I propose to explain the lexical variation in Hindi/Urdu and its absence in Kashmiri by including in the verbal projection two functional heads, Asp (Aspect) and *v* (‘light verb’), discussed in much other work which derives the aspectual properties of verbs and verbal complexes from the composition of syntactic projections above VP. In Hindi/Urdu (and hypothetically in other similar Indic languages) these functional heads each have case and categorial features which license case. A categorial selection feature derives the conditional dependency relation. The crucial difference between Hindi/Urdu and Kashmiri is that the case licensing features are able to vary in Hindi/Urdu but are fused in Kashmiri.

The next in the hierarchy is Dependent Structural Case, here Ergative and object Dative. These cases are checked within the larger verbal projection including the functional heads Asp and v. Subjects undergo further movement to TP to satisfy the Extended Projection Principle (EPP), which requires a phrase in the specifier of TENSE. The Ergative case must be checked again (to see if the condition on TENSE/ASPECT is met for finite, perfective values), and to check Nominative on subjects. This is the ‘environmentally sensitive’ case in the third group of cases, possibly including nominative objects. Finally default agreement is checked if the phi features on the verb are not in an AGREE relation with some nominative argument. This account of case features based in part on syntactic projections can be exploited not only to derive the case hierarchy, but also to explain case variation within a language and across languages.

APPENDIX

Kurmali -- Ergative case (all tenses) - dative direct object:

1) *to-kee^j nijek^j beT~yⁱ maar -t -oⁱ -u^j*
 you-dat self's son-erg beat fut 3s 2s
 2s 3s

'Self's/your son will beat you'. Mahto 1989:76

2) past progressive [progressive aspect = -e + lagaal]

sit~yⁱ kitaab-taa-0 paDh -e laagal ra-h- -i^f
 Sita-Erg book-Def read-Prt prog Past-be-3sf

'Sita was reading a book.' (Mahto 1989:50)

Dative subject, only nominative object

3) *to - ke^j okher betaa-taaⁱ pasand aa - h- oⁱ - u^j*
 you-dat their son-def-nom liking pres-be-3s-2s

'You like their son.' (Mahto 1989:76)

Punjabi (Bhatia 1993) - Split ergative language like Hindi/Urdu

4) Ergative subject, dative direct object

hakiim-ne mariiz-nuuN vekhkaa

doctor-erg patient-dat see-pf

'The doctor examined the patient.' Bhatia 173

7) Ergative subject, nominative direct object

ó -ne xat likhkaa

9) Dative subject, nominative direct object

maiN-nuuN apNii kataab pasand aaii
I- dat self's book choice come-pf
'I like my book.' Bhatia 172

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1.

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2. As this paper is focused on Ergative subject case and Dative direct object case, I will not have enough to say about Nominative direct objects to address all the issues connected with them. I am adopting the position expressed in Mohanan 1994 and other references in Mohanan's book that there is no separate 'accusative' case in Hindi/Urdu, unlike Dravidian languages such as Tamil and Kannada. So I will use the case name *nominative* for DPs without a postposition, and *dative* for the postposition *-koo* in all its uses, whether on an indirect object, experiencer subject or direct object with animate reference.

3. Dative case is not required on direct objects. As Aissen 2003 points out, it is infelicitous in Hindi to omit a dative postposition from a DP with reference to a human or animate individual. (In discussion at the conference, it was noted that it is possible to omit *-koo* when talking about interviewing prospective brides or bridegrooms (*laRkii*, *laRkaa* 'girl, boy', perhaps because the process treats the candidates as generic in some way.)

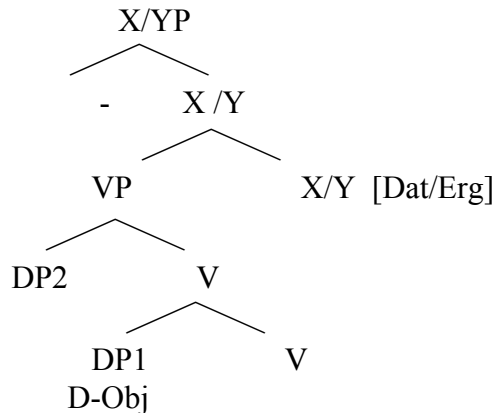
4. There seem to be differences among speakers about which verbs belong to this class and how the options for this class are realized. Some speakers allow both sentences in (16), others allow ergative subjects only with an expressed direct object. (I am grateful to K.V. Subbarao for reminding me of this variation.) Nespital 1997 contains many examples of the usage of verbs of this class.

5. The presence or absence of postpositional case on the subject affects the agreement features on the verb. A nominative object triggers agreement if the subject is postpositionally marked., otherwise the subject triggers agreement. Concretely, a proposal like Bhatt 2002 based on the AGREE between Nom and the phi/case features on INFL says that an agreeing object is an instance of Nominative. But the same object of *pahcaan* may also be nominative and not trigger

7. A variation on case selection not considered here is found in Bangla (and Tamil). In Bangla, experiencer subjects are marked with genitive case. Normally the direct objects of these verbs are marked nominative, but a small number of genitive subject verbs have dative case, the differential case used for objects with animate reference with ordinary transitive verbs (Sengupta 2001). Tamil allows accusative direct objects for a small number of dative-subject verbs (Lehman 1993, Ura 2000). No much is known at present about any semantic or syntactic differences from the usual experiencer verbs with nominative objects.

8. Another possibility is given in (i)

27)



In this structure, both X and Y are present, but as a composite projection (cf. Haider 1988). The case features [Dat/Erg] are fused as one feature which licenses one case feature, either DAT or ERG. DP1 may raise to Spec X/Y, checking DAT. or DP2 may raise to this position, checking Erg, which then must raise to INFL to be ‘ratified’ by perfective aspect. There are some technical problems about distinguishing subjects and objects so that the right case is checked, but since both subject and object originate in the same minimal projection VP, the DPs are equidistant from the Spec X/YP position.

9. Singh 1999 shows that verbs with ergative subjects are not lexically specified for +/- telic, even when perfective aspect add an endpoint. While the default interpretation of a perfective accomplishment verb is that the natural endpoint is reached, there is also an interpretation of simple termination, possibly before the natural end point is reached. For example:

- i. unhooN-nee doo ghaNTee baccee-koo khooj-aa, leekin un-koo nahiiN mil-aa
 3pl-erg two hours child-dat search-pf but 3pl-dat not get-pf
 ‘They searched for the child for two hours, but didn’t find him/her.’

ii) [shahar-meeN eek acchaa-saa makaan *khooj-nee*] kee baad ravi gaaNw-see
city-in one good-like house search-inf-gen after Ravi village-from

apnee parivaar lee aa-yaa

self's family take come-pf

After *finding* a pretty good house in the city, Ravi brought his family from the village.

(Nespital 1997: 325)

11. The semantic contribution of vector verbs is discussed in Hook 1974, Butt 1995, Butt and Ramchand 2003, papers in Verma 1993, and the preface to Nespital 1997, whose lexicon of verbs consists of sentences examples illustrating the interpretation of verbs with and without vector verbs.

12. Vector verbs combine also with the verbs I have analyzed as bare VP projections, and those which have just a projection of Asp without light v. I assume the vectors attach to V or Asp, and add the property +telic to the verbal complex. See Hook 1974, Nespital 1997.

13. An example of a quantized interpretation due to the presence of a vector verb may be the following sentence with a bare NP object:

i) siidhee-siidhee caawal-kaa khiir banaa Daal-tii huuN

straight-straight rice-gen khiir prepare. put-down-impf am

'Right away I very quickly make (the) rice khiir (pudding).' Nespital 1997:896

The vector verb *Daal-naa* 'put down, throw down' contributes the meaning of 'quickly' and also the telic reading for *banaa-naa* 'prepare, make'.