The Oblique Form as a Syntactic Case in Hindi/Urdu[1]

Goal of this paper: Show that Hindi/Urdu has an affixal case, which can be explained using an abstract syntactic case feature. This analysis requires that postpositions in Hindi/Urdu are not realizations of structural case. By eliminating the postpositions as structural case, this proposal may also help to remove case and agreement in Hindi/Urdu as an exception. (Mahajan 1990, Bhatt 2005, Legate to appear). Its exception status will be discussed later.

Proposal:

Abstract case	Ø	t° *nominative*
	Ø	v° *accusative*
	-e	p° *oblique*
(No claim)	ne	ergative
Functional head	ko	dative
	se	instrumental, source
	kaa	genitive
	mẽ	in
	par	on
	tak	toward/until
	dvaaraa[2]	through

1. Previous Proposals of Hindi/Urdu Case
   Mahajan 1990 Mohanan 1994 Butt 2004

[1] I would like to thank the Abbasi family for sharing their home and language with me. Thanks especially to Karthik Durvasula for extensive discussion and his always willing ear. Thanks also to Masahiro Yamada, Lanny Hidajat and Timothy Mckinnon. All errors and oversights are my own ☺ The following abbreviations are used in these paper: Abs – Absolutive; Acc – Accusative; Dat – Dative; Erg – Ergative; Neg – Negation; Prs – Present; LDA – Long Distance Agreement; Hon – Honorific;D– Default; PSTPRT – Past Participle;NMLZ – Nominalizer; Pass – Passive Auxiliary; PSI – Polarity Sensitive Item; Inf – Infinitive; Pst – Past; Pfv – Perfective; Impfv – Imperfective; Prog – Progressive; Hab – Habitual; Ger – Gerund; Obl – Oblique; 1 – 1st Person; 2 – 2nd Person; 3 – 3rd Person; F – Feminine; M – Masculine; N – Neuter; Sg – Singular; Pl – Plural

[2] This is a postposition I haven't heard in spoken Urdu, but is cited in Mohanan 1994:62

bacce *-ke* ***dvaaraa***
child(NN) G(NN) through (the agency of)
'through (the agency of) the child'

Ø	nom
Ø	acc
ne	erg
ko	dat

Ø	Nom
ko	Acc
ne	Erg
ko	Dat
se	Instr
kaa	Gen
mẽ/par	Loc
OBL	Non-nom

Ø	nom
ko	acc
ne	erg
ko	dat
se	instr
k-	gen
mẽ/pɑr/tɑk/ Ø	loc

Previous proposals of Hindi/Urdu case only consider postpositions.

“all case is realized by postpositions, except for nominative case.” (Davison 2004:202)

However, there are also Hindi/Urdu noun forms which alternate between ‘direct’ and ‘oblique’ forms, the ‘oblique’ is found on the complement of a postposition in (), the ‘direct’ is found elsewhere in (). The forms are obligatory (), ().

2. Oblique form of *gahd**e***

[us	gadh**e**	se]	le lo
that.OBL	donkey-M.SG.OBL	from	take-SUBJ take-2nd.sg

‘Take it from that donkey.’

3. Direct form of *gadh**a***

humara	*gəd^{ɦ}**a***	*ghaas*	*=to*	*nahin*	*kha*	*=ta*
our	donkey	grass	emph	NEG	eat	imperf

“Our donkey doesn’t eat grass.”

4. The oblique is obligatory when the NP is the complement of a postposition

*[*wo*	*gadh**a***	*se]*	*le lo*
that	donkey.MSG	from	take-SUBJ take-2nd.sg

‘Take it from that donkey.’

5. The oblique cannot appear without a postposition

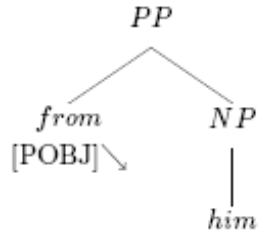
*[*us*	*gadh**e**]*	*ghaas*	*kha*	*rahaa*	*hai*
that.OBL	donkey.MSG.OBL	grass	eat	IMPERF.M.SG	3.SG

‘That donkey is eating grass.’

The oblique form is similar to the accusative *m* on ‘him’ in the English structure below.

1. Complements of prepositions in English are accusative

English PP
I took the grass [from him.POBJ]

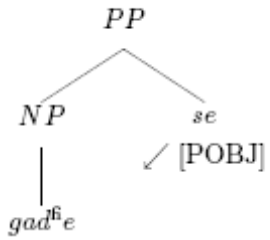


2. Complements of postpositions in Urdu are oblique

Urdu PP

us	*gəd^{ɦ}e*	*=se*	*le*	*=lo*
that	donkey-POBJ	from	take	take-2nd

"Take it from that donkey."



I claim that the oblique is also a form of case, a suffixal case rather than postpositional.

The "oblique"

The exact shape of the oblique stem depends on (a) the final phonological segment, and (b) gender (masculine and feminine) of the word.(Mohanan 1994:61)

In () below the final *-a* ending of the 'direct' masculine *gadh**a*** 'donkey' alternates with the oblique *–e* in *gadh**e*** 'horse-OBL.'

6. The oblique forms of nouns (Shukla 2001)

	Singular		Plural		
	Direct	Oblique	Direct	Oblique	
Masculine					
a)	gadh**a**	gadh**e**	gadh**e**	gadh**o**	*'donkey'*
b)	mez	mez	mez	mez**o**	*'table'*
Feminine					
c)	gadh**i**	gadh**i**	gadh**ia**	gadh**io**	*'female donkey'*
d)	bahu	bahu	bahu**e**	bahu**o**	*'daughter-in-law'*

Pronouns also show a 'direct'/'oblique alternation. In () below the nominative stem for 1st singular is *mɛ̃* while the oblique stem is *mʊjʰ*.

7. The oblique forms of pronouns (Shukla 2001)

	Singular		Plural	
	DP	[DP from]	DP	[DP from]
1	mɛ̃	**mujh** se	hum	hum se
2	tum	tum se	ap	ap se
3 Prox	ye	**is** se	ye	**in** se
3 Dist	vo	**us** se	vo	**un** se
3 Rel	jo	j**is** se	jo	j**inho** se
3 wh person	kɔn	k**is** se	kɔn	k**inhõ** se
3 wh thing	kya	k**is** se	kya	k**is** se
Place Prox	yahã	yahã se	yahã	yahã se
Place Dist	vahã	vahã se	vahã	vahã se
Place Rel	jahã	jahã se	jahã	jahã se
Place wh	kahã	kahã se	kahã	kahã se
Quantity	itn**a**/itn**i**	itn**e**		
Quantity Rel	jitn**a**/jitn**i**	jitn**e**		
Quantity wh	kitn**a**/kitn**i**	kitn**e**		
Time wh	kab	kab se	kab	kab se
3 indef person	koi	k**isi** se	koi-koi	k**isi-kisi** se
3 indef thing	kuch	kuch	kuch-kuch	kuch-kuch se
Place indef	kahĩ	kahĩ	kahĩ-kahĩ	kahĩ-kahĩ se
Quantity-Rel				
Time indef	kabi	Kabi se	kabi-kabi	kabi-kabi se

These properties have been described in Hindi/Urdu grammars (Kachru (1965), Kachru (1980:26), Pray (1970), McGregor (1972), Hook (1979), and in LFG literature, Mohanan (1994), Butt & King (2004)).

Yet, so far the GB/P&P/Minimalist literature on Hindi/Urdu case and agreement discusses only postpositions as case, overlooking the oblique forms. The oblique is not glossed in Mahajan 1990, Kidwai 2000, Davison 2004 and Dayal 2003, 2004.

8. jaan**e** kaa (Mahajan 1990:160)

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raam-ne  mohan-ko    jaane kaa vaadaa   diyaa
Ram-erg  Mohan       to go gen promise  gave
Ram promised Mohan to leave.
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9. lark**e**-ko (Kidwai 2000:65)

sitɑ-ne ek ləɽke-ko pəsənd kiyɑ
Sita-ERG a boy-DAT liking did
'Sita liked a boy.'

10. is laRk**ee**-koo (Davison 2004:209)
*maiN-nee is-laRkee-**koo** deekh **li-yaa***
I-Erg this boy-Dat see take-Pf-ms
'I saw this boy.'
11. apne kamr**e** meN (Dayal 2003 D23)
puure din maiN-ne (apne kamre meN) kitaab paRhii
whole day I-erg self's room in book-fem read-fem-sing.
"The whole day I read books in my room."
12. kamr**e** meN(Dayal 2004:403)
kamre meN cuuhaa ghuum rahaa hai
room in mouse moving is
'A mouse is moving around in the room.'

Bhatt 2005 includes it in his glossing on gerunds but not on nouns, and doesn't discuss its properties.

13. lark**e**-ne Sita-se [kitaab parRh-n**e**]-ko (Bhatt 2005:780)
ek-bhii laɽke-ne Sita-se [kitaab paɽh-ne]-ko nahĩ:
one-PSI boy-Erg Sita-Inst book.F go-Inf.Obl-Dat Neg
kah-aa
say-Pfv
'Not even a single boy told Sita to read the book.'

Only Mohanan 1994 includes the gloss and a discussion of its appearance.

14. bacc**e**-ke liye(Mohanan 1994:62)
*bacce -ke **liye***
child(NN) G(NN) for
'for the child'

Previous Discussion of the Oblique

Previous accounts of the oblique have discussed the oblique in terms of an inflectional paradigm in the lexicon. In this paper I will show that a uniform analysis of the oblique's presence can be provided if we adopt a theory of abstract case features which are determined in the syntax, and phonological realization of the case features are determined in the morphology (Legate to appear). This understanding of the oblique is may prove useful in analyzing Hindi/Urdu case and agreement.

The oblique has been discussed in the LFG framework; both LFG accounts locate the oblique formation in the lexicon.

Mohanan 1994:

- "just as stems carry information such as SINGULAR or PLURAL, they also bear the case features NOM, NONNOM, or VOC." (Mohanan 1994:61)
- "NONNOM stems must take a case clitic after them" (Mohanan 1994:62)

Butt & King 2004:

- The oblique is an agreement inflection on the complement of a K head (case postposition)
- Butt & King see "this remnant of the Sanskrit system as ensuring synchronic morphological wellformedness: if the noun is in the oblique form, then modifying adjectives must also be in the oblique form." (Butt & King 2004:168)
- The older morphological affixes (such as the oblique) may be part of the case system in other South Asian languages. (Butt & King 2004:173)

However, researchers in LFG are calling for a development in their framework to deal with case.

Butt (2005) notes that "*the differing realizational possibilities for case markers … one could argue about whether all of these different morphosyntactic creatures should all be lumped together under the label case … The overt realization of case must be dealt with by some component of the theory, however, that component is often left underspecified*." (Butt 2005:11)

So, a non-lexical analysis of the 'direct' and 'oblique' form may be brewing in the LFG literature.

Case in the Lexicon vs. Case in the Syntax

"Chomsky (1965:221–222, footnote 35) does note that he assumes case marking to be assigned at the level of phonological realization." (Butt 2005:29)

Both Mohanan 1994 and Butt & King 2004 take an approach where morphological processes take place in the lexicon (the "lexicalist" position).

Falk argues against having case in the lexicon in his proposal for an additional architecture projection in LFG for case: "the premise is that *the syntax must be able to specify the Cases that surface in the language*. In any language in which there is an accusative Case, the syntax must be able to specify it. The same is true of ergative Case. This seems to us to be *an uncontroversial assumption*." (Falk 1997)

Arguments against the (strong) lexicalist position:

Reading list

Chomsky 1970

Marantz 1997

:Arguments for inflectional morphemes in/out the syntax

:Arguments for derivational morphemes in/out the syntax

As an alternative to "lexicalism," I adopt Late Insertion of functional items (Halle & Marantz 1993, Marantz 1995, Chomsky 2001) where phonological material is inserted in the morphology to realize bundles of syntactic features. Under this approach the appearance of the oblique must be explained. This also allows a happy medium between non-uniform paradigm like morpheme class dependence and obligatory appearance (productivity) of 'oblique.'

Case feature vs. Postposition

In the next section I will provide arguments from Butt & King (2004) that the oblique is a suffix, while the case postpositions are not.

15. (a) Case postpostions =*ko* can scope over conjoined NPs (Butt & King 2004:174)

    yasin=ne [kʊtt-e or gʰoɽ-e]=ko
    Yassin.M.Sg=Erg dog-M.Sg.Obl and horse-M.Sg.Obl=Acc

    dekʰ-a hɛ
    see-Perf.M.Sg be.Pres.3.Sg

    'Yassin saw the dog and the horse.'

    (b) The oblique cannot scope over conjoined NPs

    *[[kʊtt or gʰoɽ]-e]=ko
    dog and horse-M.Sg.Obl=Acc

    (c) The oblique cannot scope over conjoined NPs

    .*[[kʊtt-a or gʰoɽ]-e]=ko
    dog-M.Sg and horse.M.Sg-Obl=Acc

16. (a) The focus particle[3] can intervene between the NP and the case postposition (Butt & King 2004:174)

    ʊs=hi=ne kam ki-ya
    Pron.3.Sg=Foc=Erg work.M.Sg.Nom do-Perf.M.Sg

    'That one himself/only did (the) work.'

    (b) The focus particle cannot intervene between the NP and the oblique

    *kʊtt-hi-e
    dog-Foc-Obl

Other potential arguments, but no one to cite yet:

[19] The focus clitic has the distribution of an adverb. As such, it has a wider syntactic distribution than the case clitics, although it is always postposed and may not be the last element of a clause. In (i), the focus clitic *hi* is shown attached to a verb.

(i) nadya=ne taʃ kʰel-a=hi hɛ
Nadya.F.Sg=Erg cards play-Perf.M.Sg=also be.Pres.3.Sg
'Nadya has only played cards.'

The realization of the oblique is dependant on morphological classes and gender. This is indicative of inflection rather than a functional head (although some functional heads show idiosyncratic realization (need to check Tim's talk and Hayes).

If the oblique were a functional head then it would select for a syntactic category rather than morphological class.

Summary: the oblique is a suffix, which is realized differently for different noun classes.

It's a suffix, but is it a feature or a functional head?
A structural case that is assigned by P⁰

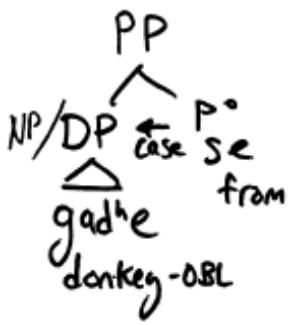
Proposal: the oblique is a case marker. The oblique is obligatory and uniform, its morphological realization is conditioned by the noun's class. This is no different from the accusative in English (which is found only on pronouns) and cases in German (which appear differently on masculine, feminine and neuter nouns).

The framework I adopt:

Case assignment: Pesetsky & Torego 2001, Frampton & Gutman 2002
Feature spreading: Vuchic 1993, Frampton & Gutmann 2006, Kratzer 2006
Morphological realization: Marantz 1997, Legate to appear

I assume that the abstract case is assigned by a postposition to its DP complement (Pesetsky & Torego 2001, Frampton & Gutman 2002).

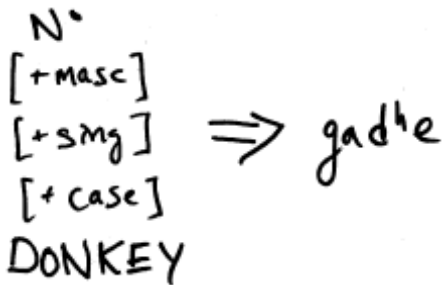
17. Case assignment[4]



The morphology receives the bundles of features and realizes the bundles as faithfully as possible given the resources of the lexicon (Marantz 1997, Legate to appear).

18. Spell out

[4] There is no evidence of a D° in Urdu, I leave open the option of a DP or an NP for the examples in this paper.



Like case in many languages (German for example), the oblique appears multiply on all elements of the DP which have an oblique form.[5]

19. us bar**e** gadh**e** se le lo
    that.OBL big-OBL donkey-OBL from take-SUBJ take-2nd.sg
    'Take it from that big donkey.'
20. Nimm den Schemel für dies**en** groß**en**
    take-2sg.imper def-OBL stool.OBL for that-OBL big-OBL
    grau**en** alt**en** unbehaart**en** ruhig**en**
    grey-OBL old-OBL un-?-hair-OBL quiet-OBL
    sitzend**en** Elefant**en** dieses Mannes
    sit-?-OBL elephant-OBL that-GEN man-GEN
    'Take the stool for this big grey old quiet hairless sitting elephant of the man.'

This structural case can be realized on pronouns, adjectives, nouns (in), the genitive postposition, postpositions (in), gerunds (in and), these are the same grammatical categories as in German ().[6]

21. [dabb**e** k**e** nic**e** tak]
    box-OBL=GEN-OBL under-OBL until
    'up to the underneath of the box.'
22. [raam k**e** baiThn**e** par] mãã-ne
    raam=GEN-OBL sit-NONFIN-OBL=ON mother=ERG
    us=ko khaanaa diyaa
    3sg.OBL=DAT food give-PERF
    'When Ram sat down, mother gave him food' (Mohanan 1994:78)
23. [Lataa-ji-k**e** ye gaanaa gaa-y**e** ho-n**e**] se (Bhatt 2005:765)

[5] I expect feature sharing to happen whenever there is a modifier, modifiee relationship (predicate modification, rather than functional application)

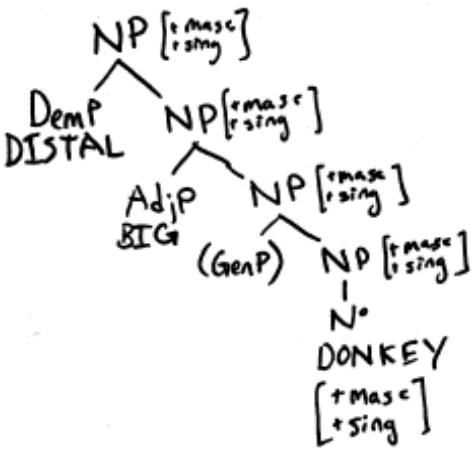
[6] If we think that the –en on participles is the same thing..

[Ashaa-ji-kaa **yeh gaanaa** gaa-yaa ho-naa]
Ashaa-Hon-Gen this song sing-Pfv be-Inf
[Lataa-ji-ke yeh gaanaa gaa-ye
Lataa-Hon-Gen.Obl this song sing-Pfv.Obl
ho-ne]-se zyaadaa mumkin hai
be-Inf.Obl-Instr more possible be.Prs.3Sg
'Ashaa-ji's having sung this song is more likely than Lataa-ji's having sung this song.'

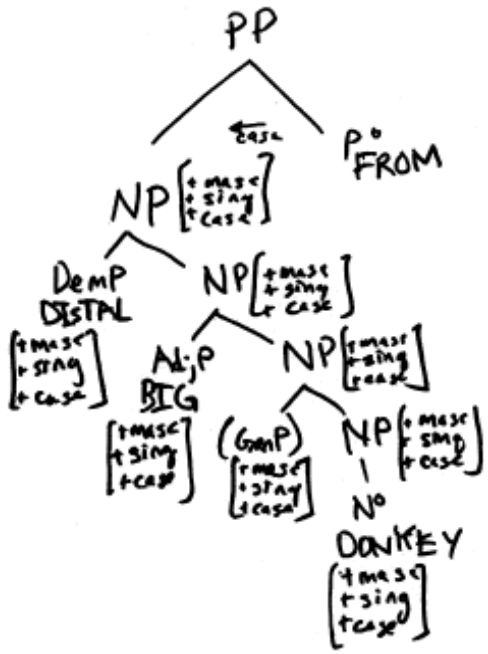
It is clear that the case and gender features are shared within the projection. One way to accomplish this feature sharing is through feature spreading (Vuchic 1993, Frampton & Gutman 2006, Kratzer 2006). This must be accomplished in a two-step process.

It is commonly assumed that the projecting sister projects its features to the mother node. As the possessor (GenP) is optional I assume it is adjoined to the NP, the same is true of the AdjectiveP. Cinque 2005 considers the DemontrativeP is also adjoined. As all elements are adjoined the features of donkey are projected.

24. The features of the noun are projected/percolated through merger (Frampton & Gutman 2006)



25. The case feature of the complement must be spread down to all elements in the DP/NP (might be controversial, need to read more literature)



Finally, the feature bundles are spelled out as words using the lexical item which matches the most of the features. In this case, the demonstrative *us* 'that' isn't specified for masculine or feminine, as there is no competing demonstrative, it is inserted. The adjective *bare* 'big' and the noun *gadhe* 'donkey' are not specified for singular or plural, as there are no competing forms for singulars these are inserted.

26. Lexical Insertion

The oblique is obligatory

So far I have shown only masculine examples where the oblique is seen overtly. In the next section I will show that the oblique is regular and required, its appearance on some words and not on others is due to its morphological availability for certain words and not others.

In order to prove that the oblique is obligatory in the examples below, I will use a demonstrative, which show overtly the 4 way distinction in number and direct/oblique marking, and an adjective which show the 2 way distinction in gender marking.

27. Hindi/Urdu demonstratives

	Singular		Plural	
	Direct	Oblique	Direct	Oblique
Proximate	ye	**is**	ye	**in**
Distal	vo	**us**	vo	**un**

28. Hindi/Urdu adjectives

	Singular		Plural		
	Direct	Oblique	Direct	Oblique	
Masculine	bar**a**	bar**e**	bar**e**	bar**e**	*'big'*
Feminine	bar**i**	bar**i**	bar**i**	bar**i**	

The morphology spells out each of these feature bundles given the resources available. If the morphology is given a masculine noun which has a lexical entry which realizes the oblique feature, the noun will surface in the oblique form, as the adjective *bar**e*** 'big' does in (). If the masculine noun does not have an oblique form, the noun will surface as the default form, as the noun *mez* 'table' does in ().

29. Masculine oblique surfaces as the direct form if there is no oblique

(a)[wo bar**a** mez] gir reha hɛ
that.DIR big-MSG.DIR table.MSG.DIR fall IMPERF-M PRES-3SG
'That big table is falling.'

(b)[**us** bar**e** mez se] le lo
that.OBL big-OBL.DIR table.MSG.OBL from take-SUBJ take-2nd.sg
'Take it from that big table.'

If the morphology is given a feminine noun with an oblique feature, it will surface the default feminine form since feminine nouns do not have a lexical entry for the oblique.

30. Feminine oblique surfaces as the direct form if there is no oblique

(a)[wo bar**i** kitaab] gir rehi hɛ
that.DIR big-FSG.DIR book.FSG.DIR fall IMPERF-F PRES-3SG
'That big book is falling.

(b)[**us** bar**i** kitaab se] le lo
that.OBL big-FSG.OBL book.FSG.OBL from take-SUBJ take-2nd.sg
'Take it from that big book.'

31. Spell out for feminine nouns

Thus the appearance and non-appearance of the oblique case does not stop it from being a regular case if one accepts Legate's (to appear) proposal that abstract case is different from overt morphological case. This shouldn't come as a surprise, we assume that "John" is marked accusative in the sentence "I see john," even though there is no way of realizing accusative on John. We know that the accusative is there because when you replace John with a pronoun, the pronoun must be accusative "him" not the nominative "he."

32. English abstract case is also realized differently on different words:
    Compare John/John and he/him.

a)	John	sees	Bill.
	NOM		ACC
b)	I	see	John.
	NOM		ACC
c)	I	see	him.
	NOM		ACC
d)	*I	see	he.
	NOM		NOM

Ramifications of a structural case

If postpositions in Hindi/Urdu are assigning/checking a case, then they must be functional heads in the syntax.

This is only compatible with an analysis of the case postpositions as something equivalent to a PP or a KP[7]. This can be argued for independently on the grounds that Hindi/Urdu postpositions have regular semantics, and introduce only one type of theta role (Butt & King 2004).

This provides a further argument that the case postpositions are certainly not realizations of "structural" case. Structural case is thought of a syntactic case feature, but a syntactic feature can't assign another case.

[7] Or maybe a DP (Bleam 2005)

If case postpositions in Hindi/Urdu are functional heads in the syntax, this explains why passivization and argument raising retains the postposition, if we consider that passives are transformationally derived from actives. The highest maximal projection is the PP, so that must be raised, postposition and all.

Look into the "to him" for English passives and compare the two passive and active sentences.

The ergative postposition is different from the others, as the pronouns are in the direct not the oblique form. I make no claims about the ergative.

33. The oblique forms of pronouns (Butt & King 2004:172)

	NOM	ERG	ACC/DAT	INST	LOC	GEN
1. Sg	mɛ̃	mɛ̃=ne	mʊjʰ=ko mʊjʰe	mʊjʰ=se	mʊjʰ=pɑr	mer-a/i/e
1. Pl	hɑm	hɑm=ne	hɑm=ko hɑme	hɑm=se	hɑm=pɑr	hɑmar-a/i/e
2. Disresp.	tu	tu=ne	tʊjʰ=ko tʊjʰe	tʊjʰ=se	tʊjʰ=pɑr	ter-a/i/e
2. Familiar	tʊm	tʊm=ne	tʊm=ko tʊmhe	tʊm=se	tʊm=pɑr	tʊmhar-a/i/e
2. Resp.	ap	ap=ne	ap=ko	ap=se	ap=pɑr	ap=k-a/i/e
3. Prox.Sg	ye	ɪs=ne	ɪs=ko ɪse	ɪs=se	ɪs=pɑr	ɪs=k-a/i/e
3. Prox.Pl	ye	ɪn=ne ɪnhõ=ne	ɪn=ko ɪnhõ=ko ɪne	ɪn=se ɪnhõ=se	ɪn=pɑr ɪnhõ=pɑr	ɪn=k-a/i/e ɪnhõ=k-a/i/e
3. Dist.Sg	vo	ʊs=ne	ʊs=ko ʊse	ʊs=se	ʊs=pɑr	ʊs=k-a/i/e
3. Dist.Pl	vo	ʊn=ne ʊnhõ=ne	ʊn=ko ʊnhõ=ko ʊnhẽ	ʊn=se ʊnhõ=se	ʊn=pɑr ʊnhõ=pɑr	ʊn=k-a/i/e ʊnhõ=k-a/i/e

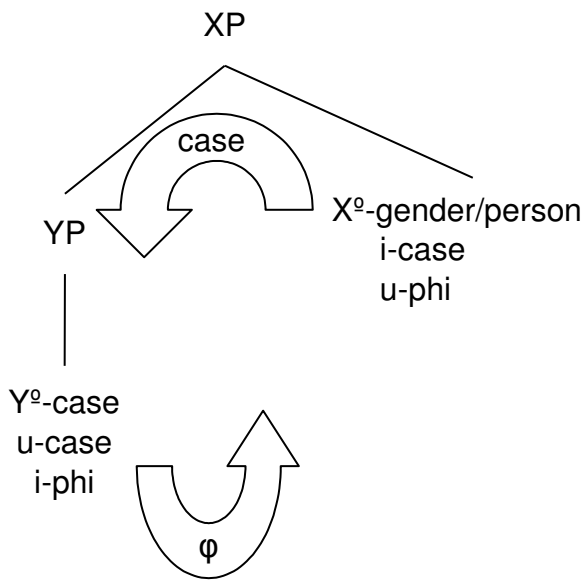
In this paper I have shown that it is possible to formalize the distribution of the oblique noun forms using a syntactic analysis. The formalization of the oblique in the syntax should be useful in analyzing the problematic Hindi/Urdu case and agreement.

Issues Hindi-Urdu case & agreement

In this section I will briefly outline areas where the case and agreement of Hindi/Urdu is claimed to behave differently from the crosslinguistic typology.

Mahajan 1990, Bhatt 2005: Case and agreement can't be two sides of a coin.

34. Case and agreement are ideally two sides of a coin, the head probes for interpretable φ-features to check its uninterpretable φ-feature, in turn, the YP has uninterpretable case features are checked by the interpretable θ-role (Chomksy 1995). Alternatively, the functional head assigns abstract case features to its complement, and the complement shares its φ-features with the functional head. ('Crash Proof Syntax' Frampton & Gutmann 2006) In either a checking or an assignment approach the features are realized as person/gender agreement on the function head, and as a case marker on the complement.
35. Case and agreement are two sides of one relationship



- Mahajan 1990: Hindi/Urdu verbs never agree with a case marked DPs. If we assume that the verb is assigning case, then the verb should agree with that DP. However, for Mahajan, the postpositions are case markers. If those are postpositions rather than case, then certainly the verb doesn't agree. My proposal derives that they don't agree.

Bhatt 2005: Hindi/Urdu is an exception to Burzio's generalization

36. Accusative Ko is retained in passives (Bhatt 2005:782)

    Sita-ko Ram-dwaaraa ḍã:ṭ-aa ga-yaa
    Sita-Acc Ram-by scold-Pfv.MSg PASS-Pfv.MSg
    'Sita was scolded by Ram.'

- This is not an exception if –ko is not a structural case.

Bhatt 2005: Hindi/Urdu infinitives license structural case.

37. The complement of an infinitive must be accusative. (Bhatt 2005:782)

[Sita-ko mujhe/*mẼ piiṭ-ne] di-yaa ga-yaa
Sita-Dat me.Acc/I.Nom hit-Inf.Obl give-Pfv.MSg Pass-Pfv.MSg
'Sita was allowed to hit me.' (='Someone let Sita hit me.')

- This is not an exception if –ko is not a structural case.

Legate 2007: Hindi/Urdu has "aggressive agreement"

- Little v will agree the subject, but if it finds no eligible DP, it will search down and agree with the object

"I propose that the pattern of agreement found in Hindi is similar in essentials to Niuean in that DPs that bear inherent ergative Case do not trigger agreement. Where the languages differ is this:
"in Hi*ndi, after the inherent Case-marked DP fails to trigger agreement, T continues to search down the tree for a DP that may trigger agreement,* i.e. a DP with structural Case. In (37c), T finds the accusative object, which then triggers subject agreement, even though it has no other relationship with T. I refer to this as aggressive agreement.31 " (Legate p17) "Evidence for aggressive agreement comes from two sources. First, we find that (pseudo)-incorporated nominals trigger agreement in Hindi, even though such DPs crosslinguistically lack Case. (See for example, Baker (1988) on the lack of Case on incorporated nouns and Massam (2001) on the lack of Case on pseudo-incorporated NPs.) Thus, these DPs trigger agreement without bearing nominative Case or raising to [spec, T], simply based on closest c-command." (Legate p17)

- This is not the only place where Hindi shows object agreement, object agreement is only in gender, never in person, where as subject agreement is both gender and/or person. This requires a look into the morphological realization and syntactic relationships behind agreement in Hindi/Urdu.

For the future

The realization of agreement in Hindi/Urdu appears to be systematic, object agreement is in gender, never person. Subject agreement may be either gender or person depending on the verb. Lexical verbs show gender, light verbs show person. This agreement pattern might indicate a systematic difference either in the agreement relations between lexical verbs and light verbs, or more simply, a difference in morphological availability between lexical verbs and light verbs.

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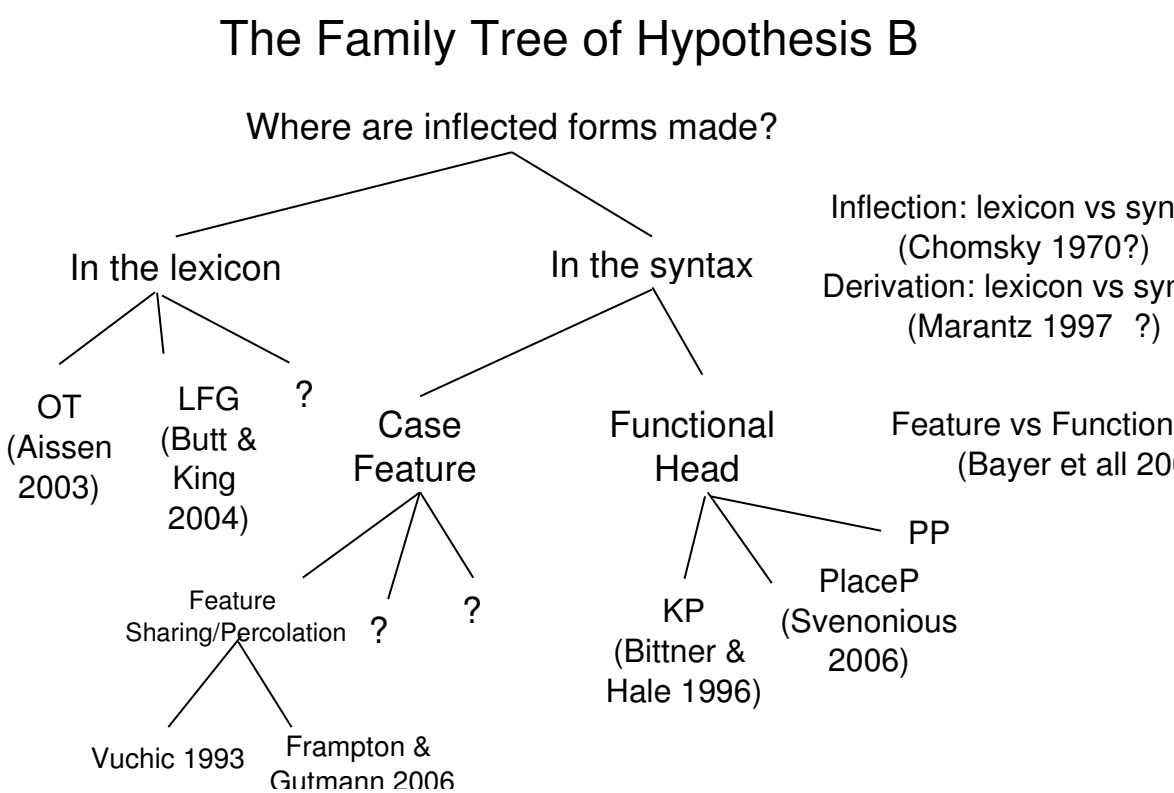
http://www-uilots.let.uu.nl/ltrc/agreement.htm
Agreement Database
http://www.ling.lancs.ac.uk/staff/anna/anna.htm

Appendix

A family tree of Hypothesis B



Two kinds of abstract case features, structural and inherent, not really relevant

Inherent case is an idiosyncratic case which depends on the lexical item which assigns the case.

If different postpositions assigned different case on a par with the oblique then it would be worthwhile investigating whether the oblique is inherent. German postpositions assign different cases, the postposition *für* 'for' assigns/checks accusative, while *von* 'from' assigns/checks dative.

However, in Urdu all postpositions assign/check oblique, as all members of a syntactic category assign/check the same case, it seems non-sensical to entertain that that case is inherent; ie an idiosyncratic case which is characteristic of a particular lexical item.

Tests for inherent case come from the verbal domain rather than the PP domain.

One test is whether the case-marked NP/DP retains its case when passivized. What the corresponding action a postposition's compliment would be escapes me. (Ben argues against A-movement as a test since non-A-moved objects loose their structural case in Icelandic passives. Ben says that if the markedness theory of ergative marking were correct, an inherent case would be a case where a co-argument is demoted, but no grammatical function change takes place. In the antipassive the object is demoted to an oblique while the subject remains a subject. Postpositions don't appear to have co-arguments in Urdu, so this test for inherent case is not possible.)

Since I think that the inherent/structural case is irrelevant this shouldn't be a problem.

My claim: postpositions are functional heads which participate in event structure, they introduce arguments. In this way they are "semantic case" if anything. They are not "structural" cases, at least not in terms of the assignment/checking of "features". They must be present as functional heads, in the syntax, because they assign a case (oblique). The oblique itself is a "structural" case in that it is a feature in the syntax, not a head.

What is agreement, can Hindi/Urdu agreement become normal if we consider (following Kratzer 2006) that gender agreement is different?

Butt 1995: there is a great deal semantic and syntactic evidence that nouns like girl in "girl-looking" are incorporated, yet the noun and verb agree.

38. "pseudo-incorporated' nouns show agreement

Anil-ne	laṛkiyã:	dekh-ĩ:/	*dekh-aa
Anil-Erg	girls.Pl	see-Pfv.FPl/	see-Pfv.D

'Anil saw girls.'

raam-ne lakDii kaaTii
Ram.M-ERG wood.F cut.Perf.Fem
'Ram did wood-cutting' (Mohanan 1994:107)

puure din maiN-ne (apne kamre meN) kitaab paRhii
whole day I-ERG self's room in book.F read.F.sg
'The whole day I read books in my room.' (Dayal 2003:[23])

This agreement has been considered a sign that the noun cannot be pseudo incorporated by Bhatt 2005. Nouns which are incorporated are not case marked and don't show agreement with the verb (Baker 1988, Massam 2001).

- However, the pseudo-incorporated noun and verb agree only in gender. Kratzer 2006 argues that sharing gender features is done under nonrestrictive modification, which is precisely the semantics for pseudo-incorporated nominals. I would like to argue that agreeing in gender is a sign of a modifier rather than an argument. And so this would confirm that they are modifiers, not arguments as has been suspected, the only barrier to this analysis before was that there was still agreement.

Is this structural case only on objects of prepositions?

Legate (to appear) argues that abstract structural accusative case in Hindi which is assigned by $v^{\varnothing}$ is the morphological default, null. This is needed for her analysis reducing absolutive to nominative or default in different languages. This is true in the verbal domain, but given the above data there *does* appear to be an overt realization of abstract structural case, that which is assigned by postpositions to their complements. As this these are postpositions rather than $v^{\varnothing}$ this doesn't challenge Legate's claim, rather Legate is most likely correct in analyzing Hindi/Urdu case and agreement as non-standard in that it lacks a morpheme specific to structural accusative case.

No, there are other obliques that don't have a postposition

Now that we consider that the oblique is a case, we need to find case assigners for its appearance.

Yet, there are obliques which have no obvious postposition to assign case

39. The oblique as a locative (Butt & King 2004:168) [8]

adnan ḍakxane gɛ-ya
Adnan.M.Sg.Nom post office.M.Sg.Obl go-Perf.M.Sg
hɛ
be.Pres.3.Sg
'Adnan has gone to the post office.'

[8] Butt & King discuss another use of the oblique: "The one use of the oblique marking in the modern system in which the original case function has been preserved is the use of the oblique to mark locatives as in (17). The meaning of this locative use is restricted: it can only mean 'to' or 'from', not 'in', 'towards', etc. We thus distinguish between two forms of the oblique morphemes (section 5): one as agreement inflection on the complement of a K head, and one as a locative case marker. (Butt & King 2004:168)

40. The oblique in inalienable possession (Mohanan 1994:178)

is	*billii-kii / -ke*	*ek*	*hii*	*āāk^h*	*hai.*
this	cat-G	one	only	eye-N(F)	be-PR

This cat has only one eye.

is	*haat^{h}i-kaa / -ke*	*bahut*	*c^{h}oṭaa*	*mastak*	*hai.*
this	elephant-G	very	small	forehead-N(M)	be-PR

This elephant has a very small forehead.

41. The oblique (maybe) in an adjunct under the emphatic particle, not m.sg because the gen on the subject is also marked as oblique. What dialect is this?

raam-ke	*baiṭ^{h}te hi*	*mãã-ne*	*usko*	*k^{h}aanaa*	*diyaa.*
Ram-G	sit-NF	mother-E	pron-D	food-N	give-PERF

As soon as Ram sat down, mother gave him food.

Davison 2004:202

maiN	yah	baat	pahlee	hii	samajh-aa
I-nom	this	matter	first	only	understand-pf

[ki	raakeeš	apnii	zid-par	dṛh	hai]
that	Rakesh	self's	obstinacy-on	fixed	is

'I understood from the first that Rakesh had become fixed on his own obstinacy.' (Ibid.)

42. The oblique under *allow* (Bhatt 2005 :778)

[Sarosh-ko gaaRii chalaa-n**e**] di-i

Nadia-ne	[Sarosh-ko	**gaaṛii**	chalaa-ne]	**di-i**
Nadia-Erg	Sarosh-Acc	car.F	drive-Ger.Obl	let-Pfv.FSg

'Nadia let Sarosh drive the car.'

[peR kaT-n**e**] di-ye (Bhatt 2005:795)

Nadia-ne	[**peṛ**	kaṭ-ne]	**di-ye**
Nadia-Erg	trees	cut$_{Intr}$-Inf.Obl	let-Pfv.Pl

'Nadia let the trees get cut.'

43. In a conditional (collected from a web forum)

Agr mere	pice	kutta	bhonkn**e**	laga
if 1st-GEN-OBL	behind-OBL	dog	bark-NONFIN-OBL	start-M.SG
to	main	zurud	bhag	jaoongi
then	1sg	certainly	run	go-1sg=FUT

'If a dog started barking after me then I would certainly run.'

raam-ne	caahaa	siitaa ko	dekhnaa
Ram-erg	wanted	Sita	to see

Like multiple obliques with in a DP, the oblique can appear on conjoined verbs

44. Multiple marking on conjuncts (collected in a web forum)

main	aap ko			
1.sg	2sg.FORMAL=DAT			
danda dhondn**e**			ya phir	jota oTarn**e**
stick look.for-NONFIN-OBL			or even	shoe take.off-NONFIN-OBL
duun	gaa	kya?		
Allow-1.SG	FUT	Q		

It is a structural case, but is it a structural case assigned what. What unifies postpositions, locatives, inalienable possessives, permissives and focus?
An existential operator…?

-e on arguments of verby heads

"The subjects of eligible transitive verbs were marked as oblique" (Butt & King 2004)
(19)

(19) jihi rac-e suraga bhu
who.Obl create-Perf.M.Pl heaven.M.Nom earth.Nom
satta pātāla
seven.Nom hell.M.Nom
'Who made heaven, earth, the seven hells.' [Old Hindi]
[He who created heaven, earth and the seven hells.]
(Chand, Prithiraja-Rasau i.11; Beames 1872: 267)

No –e

Kidwai 2000:165

rɑm-ne$_i$	mohən$_j$-ko	əpni$_{i/j}$	kɪtɑb	lɔʈɑ	di
Ram(SU)	Mohan(IO)	self's	book(DO)	return	gave

'Ram$_i$ returned Mohan$_j$ self's$_{i/j}$ book.'

Masculine nouns

Sona, sone gold Butt& King 2004:164

Shukla 2001:6

Masculine:

देवता	dēvtā	'god'
राजा	rājā	'king'
पानी	pānī	'water'
पेड़	pēṛ	'tree'

Feminine:

स्त्री	strī	'woman'
रानी	rānī	'queen,'
हवा	havā	'wind'
नदी	nadī	'river'

3rd singular –e

Butt& King 2004:165

ʊs=se cɑl-a nɑhĩ ja-e-g-a
Pron=Inst walk-Perf.M.Sg not go-3-Fut-M.Sg

'She/he can't possibly walk.' (in the context of a broken leg)
(Glassman 1976: 275)

Kidwai 2000:43

rɑm-to ɑyegɑ, ɔr koi ɑye-na-ɑye
Ram-TOP will come else any come-not-come
'RAM will come, whether anybody else comes or not.'

Participles (with varying gender)

Participles (this is not oblique as it it should become –i with a fem subject) (Mohanan 1994:182)

šriikr̥ṣn̥-kaa [___ muskuraate hue] janm huaa.
Sri Krishna-G smile-NF be-NF birth-N happen-PERF
Sri Krishna $_i$ was born, ___ $_i$ smiling.

Can this be in the oblique, us aurat instead of voh aurat

Left dislocated topics in Hindi bear ABS (Dwivedi 1994)[6]

[6]As illustrated in Mohanan 1994, hanging topics may also agree in case with the related clause-internal DP.

Voh aurat, john *us-se* dilo jaanse pyaar kartaa he
that woman.ABS John *her-INSTR* whole-heartedly love do be
"John is madly in love with that woman" (Chandra 2004)

Plural –e

45. (Bhatt 2005:787)

Anil-ne laṛke dekh-e/ *dekh-aa
Anil-Erg boys.M see-Pfv.MPl/ see-Pfv.D
'Anil saw boys.'

Anil-ne laṛkiyã: dekh-ĩ:/ *dekh-aa
Anil-Erg girls.Pl see-Pfv.FPl/ see-Pfv.D
'Anil saw girls.'

46. Is that certainly plural in this example? (Bhatt 2005:796)

kapṛe$_i$ [t_i aaj-tak ban
clothes.MPl today-by make$_{Intr}$
jaa-ne/*jaa-naa] chaahiye
GO-Inf.MPl/GO-Inf.MSg should
the/*thaa
be.Pst.MPl/*be.Pst.MSg
'The clothes should have been made by today.'

Forms of *se – sa,si,se?*

(Butt & King 2004:170)

The instrumental *se* may either be connected with Sanskrit *sam* 'with' or with the locative singular noun *sañge* 'in attachment to' (Kellogg 1893: 132). The genitive arose out of a participial form of 'do' (fn. 11), and the

47. Kon saa (Mahajan 1990:40)

raam-ne kOn saa aadmii siitaa se kahaa[$_{CP}$ (ki) t

Ram(SUB) which man(EDO) Sita to told (that)

aayaa thaa]

come-perf-m be-pst-m

lit. Which man did Ram tell Sita had come.

48. Kon sii (Mahajan 1990:

(29) [kOn sii daasii$_i$ raajaa-ne uske$_i$ pitaa-ko [t_{sub} t_{IO} t_{DO}

which maid(DO) king(SUB) her father(IO)

lOTaa dii]]

return give-pst-f

Which maid$_i$ did the king return to her$_i$ father?

49. Kon sii (Mahajan 1990 :117)

apnii kOn sii kitaab raam-ne pheNk dii ?
self's which book Ram-erg. threw away
Which of self's book did Ram throw away?

Adverbs (might show acc like in quechua)

50. Dhire dhiire 'slowly' (Mahajan 1990:123)

kis-ne dhiire dhiire kaam kiyaa
who slowly work did
Who worked slowly?

51. Kese (mahajan 1990)

raam-ne kyaa kahaa thaa ki mohan-ne kis-ko kEse maaraa
Ram-erg KYAA said Mohan whom how hit
How did Ram say that Mohan hit who - ?

raam-ne kyaa kahaa thaa ki mohan-ne kab kis-ko kEse
Ram-erg KYAA said Mohan-erg when whom how
maaraaa
hit
How did Ram say that Mohan hit whom when?

52. phir se (bhatt 2005:766)

Rohan-ne aaj [phir-se **mehnat** **kar-nii**] **chaah-ii**
Rohan-Erg today again hardwork.F do-Inf.F want-Pfv.FSg
'Today Rohan wanted to work hard again.'

53. Jaldii jaldii/jaldii se 'quickly'
54. baRi caturtaa se 'cleverly'
55. kitne 'how many'

kitne ran se$_1$ [raam-ne puchaa [t$_1$ [kOn sii Tiim ko$_2$ [raam soctaa hE ki [t$_1$' [t$_2$' [hamaarii Tiim t$_1$" t$_2$" haraayegii]]]]]]]

Vaalaa,vaalii,vaale

56. In a possessive (Mahajan 1990:37)

[apnii$_i$ raam$_j$ vaalii kitaab]$_k$ mE-ne$_i$ t'$_k$ use$_j$ t$_k$

self's Ram's book (DO) I (SUB) him(IO)

dii

give-perf-f

lit. My Ram's book, I gave to him.