

# A Case for Bare Accusatives in Hindi-Urdu

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ABSTRACT

I propose and evaluate an Agree-based analysis of accusative allomorphy in Hindi-Urdu. Evidence for a bare accusative form comes from the grammaticality of bare objects in non-finite environments. I argue that accusative case is checked compositely by Voice and *v*. Subject case (nominative and ergative) is checked by Fin, T and Asp. I also argue that case and agreement must be dissociated in HU as T may agree with nominals it does not assign case to.

## 1 Introduction

In this paper, I propose and evaluate an Agree-based analysis of accusative case in Hindi-Urdu (henceforth, HU) first put forward in Kidwai (2019). Firstly, I argue that the HU accusative has two forms, *-ko* and  $-\emptyset$ . Evidence for a bare accusative form comes from the grammaticality of bare objects in non-finite environments where T is absent and consequently nominative case is unavailable. As a result, all direct objects (DOs) in transitive clauses are accusative. The alternation between the two accusative forms results in differential-object-marking (DOM). Secondly, I propose a composite case-checking mechanism. Each case comprises a bundle of sub-features which are checked by functional heads (F<sup>0</sup>s). The case-feature is checked once all the sub-features have been checked. Consequently, multiple F<sup>0</sup>s may be involved in checking a single case. Accusative case is checked compositely by Voice and *v* while subject cases (nominative and ergative) are checked by Fin, T and Asp. I also argue that case and agreement must be dissociated in HU as T may agree with nominals it does not assign case to. I adopt Bhatt’s (2005) AGREE relation for agreement while keeping Agree for case assignment.

This paper is organised as follows. Section 2 introduces the HU case system and discusses the problems with the mainstream analysis of bare objects as nominative. Section 3 presents the proposed alternative of analysing bare objects as accusative. Section 4 concludes with remaining open issues.

## 2 Background

HU has 7 cases: nominative ( $-\emptyset$ ), ergative (*-ne*), accusative (*-ko*,  $-\emptyset$ ), dative (*-ko*), instrumental (*-se*), genitive (*-k-*) and locative (*-mein*, *-par*, *-tak*,  $-\emptyset$ ). Following previous work (Mohanan 1994, Butt and King 2004), I take *-ko* to be accusative on DOs and dative elsewhere. I also propose two forms of accusative case which I will argue for through the course of this paper.

Accusative case is found on DOs with both ergative and nominative subjects (1). DOM, conditioned by specificity/definiteness, results in alternation between *ko*-marked and bare objects.

- (1) a. Omar=*ne* **kelay**(=**ko**) khaya.  
Omar=*ERG* banana(=**ko**) ate.PFV.M.SG  
‘Omar ate a/the banana.’  
b. Omar **kelay**(=**ko**) khaey-ga.  
Omar.NOM banana(=**ko**) eat.IPFV.3SG-FUT.M.SG  
‘Omar will eat a/the banana.’

Following Burzio’s Generalisation (BG), accusative case is lost in passives (2 vs 3).

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- (2) Sana=ne Omar=ko pakRa.  
 Sana=ERG Omar=ACC catch.PFV.M.SG  
 ‘Sana caught Omar.’
- (3) a. **Omar** pakRa gya.  
 Omar.NOM catch.PFV.M.SG PASS.M.SG  
 ‘Omar was caught.’
- b. \*[ **Omar** jaldi=se pakRa jaa-na ] heraande he.  
 [ Omar.NOM quickly=INS catch.PFV.M.SG PASS-INF ] surprise-causing be.PRS.3SG  
 ‘For Omar to get caught quickly was surprising.’

It is often claimed that there are some dialects of HU which are exceptions to BG and preserve accusative case in passives (4-a). Bhatt (2007) shows that these objects are not promoted and licensed by T and so these are not true instances of passivisation. This is illustrated by the grammaticality of marked objects in non-finite clauses (4-b) as opposed to the ungrammaticality of promoted objects in non-finite true passives (3-b). As such, I do not take these sentences to be real exceptions to BG that need to be accounted for by the proposed analysis.

- (4) a. **Omar=ko** pakRa gya.  
 Omar=ACC catch.PFV.M.SG PASS.M.SG  
 ‘Omar was caught.’
- b. [ **Omar=ko** jaldi=se pakRa jaa-na ] heraan-de he.  
 [ Omar=ACC quickly=INS catch.PFV.M.SG PASS-INF ] surprise-causing be.PRS.3SG  
 ‘For Omar to get caught quickly was surprising.’

Another common claim is that DOs cannot be marked when there is a dative indirect object (IO) in the same clause (5-a) (Mohanan 1994). This is not accurate as DOs scrambled over the IO can be marked (5-b) (Bhatt and Anagnostopoulou 1996). The need to scramble for marking has been used as evidence for obligatory object shift (OS) for accusative case assignment in HU. I set aside OS in formulating the analysis for now, but consider how it can be incorporated into the analysis in section 4.

- (5) a. Sana=ne Omar=ko **khath**(\*=ko) bheja.  
 Sana=ERG Omar=DAT letter(\*=ACC) send.PFV.M.SG  
 ‘Sana sent Omar a/the letter.’
- b. Sana=ne **khath**(=ko) Omar=ko bheja.  
 Sana=ERG letter(=ACC) Omar=DAT send.PFV.M.SG  
 ‘Sana sent Omar a/the letter.’

Agreement in HU is with the highest bare argument. Object agreement is seen when the subject is non-nominative and the object is bare (6-b). If both the subject and object are marked, then agreement goes to default (3.M.SG) (6-c).

- (6) a. Sana kelay / kelon=ko kha-rahi he.  
 Sana.NOM bananas / bananas=ACC eat-PROG.F.SG be.PRS.3SG  
 ‘Sana is eating (the) bananas.’
- b. Sana=ne kelay khaiy the.  
 Sana=ERG bananas eat.PFV.M.PL be.PST.M.PL  
 ‘Sana ate bananas.’
- c. Sana=ne kelon=ko khaya tha.  
 Sana=ERG bananas=ACC eat.PFV.M.SG be.PST.M.SG  
 ‘Sana ate the bananas.’

Object agreement has been the primary reason for most previous analyses to take bare objects

to be nominative (Mohanani 1994, Butt and King 2004). This follows directly if bare objects like bare subjects are nominative. However, this sort of approach faces several theoretical and empirical challenges.

In an Agree-based case assignment framework, *v* checks accusative case on the object and finite T checks nominative case on the subject in sentences with nominative subjects and marked objects (6-a). In sentences with ergative subjects and bare objects (6-b), these approaches claim that ergative case is inherent and T checks nominative case on the object. To explain why *v* doesn't check accusative case on the object before T is merged, it is assumed that perfective *v* cannot assign accusative case. However, we also have sentences with ergative subjects and marked objects (6-c). The presence of marked objects cannot be explained if we assume perfective *v* is unable to assign accusative case. Finally, in sentences with nominative subjects and bare objects (6-a), we must explain how and why T checks case twice, and why (imperfective) *v* does not assign accusative case to the object.

The empirical challenge for these approaches comes from the grammaticality of bare objects in non-finite clauses. Bare subjects are ungrammatical in non-finite clauses (7). This is expected as finite T is absent in non-finite clauses and cannot check nominative case. Conversely, bare objects are grammatical in various non-finite environments (8) (Mahajan 2017).<sup>2</sup> If both bare subjects and bare objects are nominative then why should only one have a finiteness condition?

- (7) \* [ **Omar** toRa hua ] glass...  
 [ Omar.NOM break be.M.SG ] glass...  
 ≠ 'The glass broken by Omar...'
- (8) a. Omar=ne [ Hira=ke **un glass** toR-ne ] =par  
 Omar=ERG [ Hira=GEN.PL those glasses break-INF.OBL ] =LOC Nabeel=ACC  
 Nabeel=ko daanta.  
 scold.PFV.M.SG  
 'Omar scolded Nabeel for Hira's breaking of those glasses.'
- b. Omar [ **vo billiyan** kharid-na ] chah-raha he.  
 Omar.NOM [ those cats buy-INF ] want-PROG.M.SG be.PRS.3SG  
 'Omar wants to buy those cats.'

The theoretical and empirical concerns discussed above show that we need to rethink the case of bare objects as there are several problems with simply analysing them as nominative. In the following section, I propose and evaluate an alternative: accusative case has two forms, *-ko* and *-∅*. DOM is not the alternation between accusative and nominative case but rather the alternation between the two forms of accusative case.

### 3 Accusative Allomorphy

In this section, I first discuss case assignment of ergative, nominative and accusative case. I propose a composite case-checking process by which multiple F<sup>0</sup>s are involved in checking of a single case feature. Ergative and nominative case are checked by higher F<sup>0</sup>s (Fin, T and Asp) while accusative case is checked by lower F<sup>0</sup>s (Voice and *v*). I then show that case and agreement must be dissociated in HU. I adopt Bhatt's (2005) AGREE relation for agreement while keeping Agree for case assignment. AGREE is essentially the same as Agree except that it is not subject to the Activity Condition. This allows T to agree with nominals whose case it does not check. Finally, I address some criticisms of accusative allomorphy (*-ko* vs *-∅*) from previous works.

<sup>2</sup>Thanks to an anonymous reviewer for pointing out that the presence of a determiner with a plural object negates the possibility of these bare objects being cases of pseudo-incorporation.

### 3.1 Case Assignment

In Agree-based case assignment,  $F^0$ s with uninterpretable features (uFs) probe downwards in their c-command domain to enter into Agree with the nearest goal with matching features. Crucially, the probe's uFs and the goal's case-feature must be unvalued for the two to enter into Agree (Activity Condition - Chomsky, 2001). Thus, case and agreement are two sides of the same coin. However, as will be discussed in the next section, I take Agree to be responsible for case assignment only.

HU is generally characterised as a split-ergative language on the basis of aspect. Ergative case is seen in perfective sentences but not imperfective ones (9). So  $\text{Asp}_{[+PFV]}$  checks ergative case.

- (9) a. **Sana=ne** mosambi=ko khaya.  
 Sana=ERG orange=ACC eat.PFV.M.SG  
 'Sana ate the orange.'
- b. \***Sana=ne** mosambi=ko khatha he.  
 Sana=ERG orange=ACC eat.IPFV.M.SG be.PRS.3SG  
 ≠ 'Sana eats the orange.'

However, perfective aspect is not enough for ergative case assignment. Ergative case is also conditioned by tense, and is only found with present and past tense (10). Moreover, there is a finiteness condition: ergative case is not found in non-finite clauses even when the tense and aspect conditions are met (10-c). Thus,  $T_{[-FUT]}$  and  $\text{Fin}_{[+FIN]}$  are also needed to check ergative case.

- (10) a. **Sana=ne** mosambi=ko khaya he / tha.  
 Sana=ERG orange=ACC eat.PFV.M.SG be.PRS.3SG / be.PST.M.SG  
 'Sana has eaten / ate the orange.'
- b. \***Sana=ne** mosambi=ko khaey ga.  
 Sana=ERG orange=ACC eat.3SG  
 ≠ 'Sana will eat the orange.'
- c. \*[ **Sana=ne** banaya hua ] khaana...  
 [ Sana=ERG make.PFV.M.SG be.PFV.M.SG ] food...  
 ≠ 'food made by Sana...'

I assume that case features can be decomposed into bundles of sub-features. For example, ergative case can be decomposed into  $[+FIN, -FUT, +PFV, \dots]$ .<sup>3</sup>  $F^0$ s check sub-features rather than the entire case feature, as shown for ergative case in Figure 1. This leaves the case feature unvalued until all sub-features have been checked, allowing multiple  $F^0$ s to enter into Agree with the same nominal without violations of the Activity Condition.<sup>4</sup>

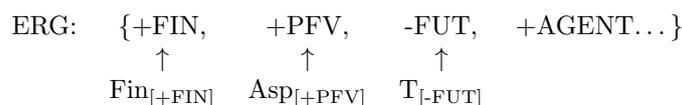


Figure 1: Ergative decomposition.

Similarly, nominative case is also subject to a finiteness condition (11) so we can easily identify  $\text{Fin}_{[+FIN]}$  as one of the  $F^0$ s needed to check nominative case.

- (11) \*[ **Sana** banaya hua ] khaana...  
 [ Sana.NOM made.PFV.M.SG be.PFV.M.SG ] food...

<sup>3</sup>There is an ongoing debate regarding the status of ergative case as structural or inherent case. The HU ergative is associated with configurational factors but is also associated with the agent theta-role as shown in Figure 1. Thus, it shows properties of being associated with both structural and inherent case.

<sup>4</sup>Composite case-checking of the HU ergative has also been proposed by Davison (1999) although she only takes perfective aspect and finiteness as requirements for ergative case assignment.

≠ ‘food made by Sana. . .’

Identifying the values of Asp and T is less straightforward. Nominative case is found in imperfective sentences of all tenses (12) and in future perfective sentences (13).

- (12) a. **Sana** mosambi khathi he.  
 Sana.NOM orange.ACC eat.IPFV.F.SG be.PRS.3SG  
 ‘Sana eats oranges.’  
 b. **Sana** mosambi khathi thi.  
 Sana.NOM orange.ACC eat.IPFV.F.SG be.PST.F.SG  
 ‘Sana used to eat oranges.’  
 c. **Sana** mosambi khathi-rehay gi.  
 Sana.NOM orange.ACC eat.IPFV.F-PROG.FUT.3SG FUT.F.SG  
 ‘Sana will keep eating oranges.’
- (13) **Sana** mosambi khaiy gi.  
 Sana.NOM orange.ACC eat.PFV.FUT.3SG FUT.F.SG  
 ‘Sana will eat an orange.’

We can think of nominative case as the default or elsewhere case in finite clauses. I propose that nominative case is found when the conditions for checking ergative case are not met. When ergative case assignment requirements are fulfilled, it takes precedence over nominative case as the more specific feature bundle (Elsewhere Principle). So nominative case still requires checking by the relevant F<sup>0</sup>s but the sub-features are not specified for value, as shown in Figure 2.

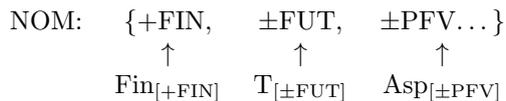


Figure 2: Nominative decomposition.

Finally, let us establish the conditions for accusative case assignment. Accusative case is only found in active clauses, as established by the passivisation facts discussed in section 2. From this, we can identify Voice<sub>[+ACT]</sub> as one of the F<sup>0</sup>s involved in checking accusative case. The second requirement for accusative case is transitivity. Objects of dative predicates can never be marked, even when they are proper names which would otherwise be obligatorily marked (14).

- (14) Sana=ko **Omar**(\*=ko) yaad-aya.  
 Sana=DAT Omar(\*=ACC) memory-come.PFV.M.SG  
 ‘Sana remembered/missed Omar.’

Subbarao (2012) explains that dative predicates are unable to assign accusative case because they have a similar structure to unaccusatives, i.e. they lack an external argument. They are, therefore, not transitive. I take transitivity to be a feature of *v* (although it is likely that transitivity is a structural property rather than strictly speaking a feature). So accusative case is checked by Voice<sub>[+ACT]</sub> and v<sub>[+TR]</sub> (Figure 3).

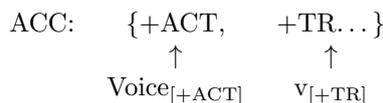


Figure 3: Accusative decomposition.

We can now attribute the lack of DOM on objects of dative predicates to the fact that they are

not accusative but are in fact nominative. Little *v* does not meet the transitivity condition so the [+TR] sub-feature, and subsequently, accusative case, cannot be checked. When Fin, T and Asp probe, the subject is not visible as it has already been assigned dative case as a structural or inherent case within a PP. Fin, T and Asp continue probing until they find the object. Since the object is never an agent, the conditions for ergative case are never met and so objects of dative predicates are assigned nominative case.

## 3.2 Agreement

In sentences with ergative subjects, agreement is with the bare object which is accusative under the current proposal. T is not involved in checking its case yet agrees with it. There are other reasons to believe that case and agreement are dissociated in HU too.

Firstly, bare objects in non-finite clauses can trigger agreement (15). As discussed earlier, these objects cannot be nominative since there is no finite T. Bare accusative objects can, therefore, trigger agreement.

- (15) Sana=ko [ billiyan **dekh-ni** ] **hein**.  
 Sana=DAT [ cats.ACC see-INF.F.PL ] be.PRS.3PL  
 ‘Sana wants to see (the) cats.’

The second piece of evidence comes from long-distance agreement (LDA) (Bhatt 2005). LDA is seen when the main verb does not have any bare arguments and agrees with the bare embedded object as in (15). Matrix T does not check case on the embedded object, so once again, we see agreement with a nominal T does not enter into Agree with.

On the basis of evidence from LDA, Bhatt (2005) argues for the dissociation of case and agreement in HU and proposes a modified version of Agree which he calls AGREE (16).

- (16) “AGREE is the process by which a head  $X^0$  (the Probe) with a complete set of unvalued uninterpretable features, identifies the closest  $Y^0/YP$  in its c-command domain with the relevant set of *visible* matching (i.e. non-distinct) interpretable features (the Goal), and uses the uninterpretable features of  $Y^0/YP$  to value its uninterpretable features.” (p.758)

In essence, the two processes are almost identical with the sole exception that Agree but *not* AGREE is subject to the Activity Condition. The effect is that  $F^0$ s can agree with nouns they do not assign case to. In LDA, matrix T agrees with the embedded object despite not assigning case to it. In local agreement with bare accusative objects, once again, T does not assign case to these objects but is able to agree with them. Moreover, AGREE is only possible with *visible* goals, referring to bare arguments - the case markers “block” agreement although it is unclear why.

Figures 4 and 5 illustrate case assignment and agreement with nominative and ergative subjects in transitive monoclausal sentences respectively.<sup>5</sup>

## 3.3 Criticisms

Accusative allomorphy has been criticised by Mohanan (1994) on the basis of three differences between bare and marked DOs: agreement, stem selection and coordination.

### 3.3.1 Agreement

As we have seen, bare objects can trigger agreement if the subject is marked but marked objects never trigger agreement (section 2, ex.6). Mohanan takes this as evidence that the two have different cases, i.e. bare objects are nominative while marked objects are accusative.

<sup>5</sup>I take the subject to originate in Spec-VoiceP where it is assigned case. It then moves to Spec-TP to satisfy EPP.

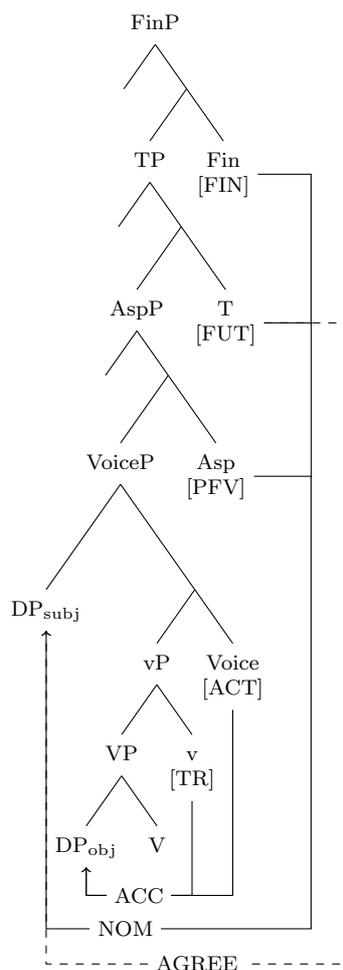


Figure 4: Case assignment and agreement with NOM subject.

However, this is not necessarily correct. We have already seen that case markers can block agreement in HU (section 2, ex.6). If we take agreement to be post-syntactic (Bobaljik 2008), then we expect agreement to be dependent on morphological form rather than case feature. It is unsurprising then that the two types of accusative objects behave differently when it comes to agreement: they have different forms despite having the same case feature.

### 3.3.2 Stem selection

HU has two stem forms for nominals: direct and oblique. Oblique forms are found with overt case markers while direct forms are seen in bare nominals. Mohanan (1994) points out that if we assume accusative allomorphy, then we are forced to assume that one form of the accusative (- $\emptyset$ ) selects direct stems while the other (-*ko*) selects oblique stems, as illustrated in (17).

- (17) *ghoRa* (horse.DIR.ACC) vs. *ghoRe=ko* (horse.OBL=ACC)

Once again, this difference can be attributed to morphology. Presumably, the stem forms are selected by the morphological case markers rather than syntactic case-features. So it is not so that the accusative case feature sometimes selects one stem form and sometimes the other but rather

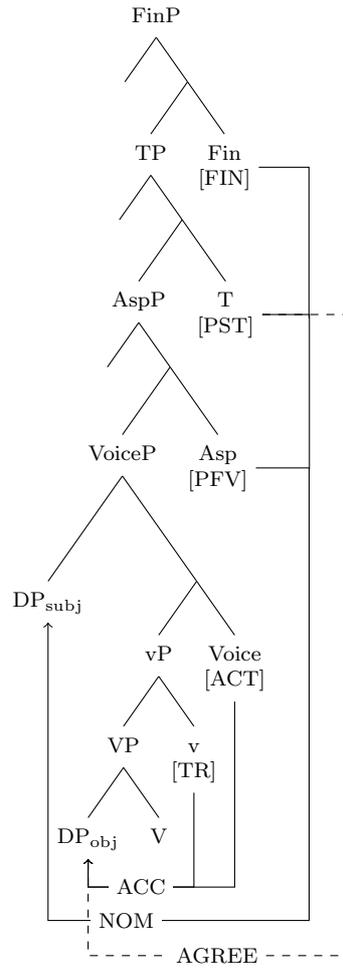


Figure 5: Case assignment and agreement with ERG subject.

that overt case markers select oblique stems while null markers select direct stems.<sup>6</sup>

### 3.3.3 Coordination

The final argument Mohanan (1994) gives against accusative allomorphy is that bare and marked objects cannot be coordinated (18-b). This is unexpected if both types of objects are syntactically identical.

- (18) a. [ ghoRa            aur kutta            ]  
           [ horse.DIR.ACC and dog.DIR.ACC ]  
           ‘horse and dog’  
       b. \*[ ghoRe=ko        aur kutta            ]  
           [ horse.OBL=ACC and dog.DIR.ACC ]  
           ≠ ‘the horse and dog’

Firstly, the ungrammaticality of coordinating two mismatched case forms may arise from a more

<sup>6</sup>Oblique marking with null locative is different from oblique marking elsewhere as it is a remnant of the Sanskrit locative case (Butt and King 2004:13).

general constraint on case-marking of both conjuncts. In coordinated phrases, the case marker is most naturally realised once on the whole phrase. It is highly marked for the case marker to be realised on each conjunct, which may skew judgements for sentences like (18-b).

That being said, although it is marked for both conjuncts to carry case-marking, it is not as unacceptable as case-mismatching between the conjuncts or form-mismatching as in (18-b). Since the case-feature on both conjuncts is realised through one marker, it is likely that both conjuncts need to share sub-features, such as  $[\pm\text{specific}]$ , to make both of them compatible with the single marker. Therefore, even though the two conjuncts may share the same case-feature (accusative), difference in non-case features may prevent them from being coordinated - in coordinating two accusative conjuncts, this difference is reflected in form-mismatching.

## 4 Open Issues

Although the proposed analysis achieves significant empirical success while avoiding many of the theoretical hurdles faced by other accounts, there are still several loose ends, of which I discuss some in this section.

The most pressing open issue is accusative form selection. Recall that it has been argued that object shift is obligatory for DOs to be *ko*-marked in HU (section 2, ex.5). To include OS in the proposed analysis, we must assume that accusative case is assigned to the object in its base position, following which specific objects move to outside VP (or alternatively, objects which move receive a specific interpretation), and that accusative case is realised as  $-\emptyset$  in the base position and as *-ko* in the moved position. We are faced with two obstacles. Firstly, although OS always results in specific interpretations, it does not always lead to marking (section 2, ex.5b). This is related to the other problem: although marked objects are always interpreted as specific, bare objects may be either specific or non-specific, making it difficult to associate specificity with *ko*-marking. The latter reason also makes a realisational approach, where a  $[\text{+specific}]$  feature is realised as *-ko*, difficult to implement since specific nominals may be unmarked.

The place of Agree and AGREE in the grammar also poses a challenge. The two processes are almost identical, barring the Activity Condition, and must somehow be reconciled. We cannot do away with the Activity Condition completely as case assignment does rely on activity. There may be some merit in thinking of Agree as operating within the syntax while AGREE is its morphological parallel. This is already implied when we take agreement to be post-syntactic. The overarching similarities of the two processes would not only be explained but also expected under this sort of conceptualisation.

Another open issue is the representation of transitivity in capturing it as a requirement for accusative case assignment. As mentioned briefly, transitivity is a structural property which does not strictly speaking seem to be a feature as I have assumed in this paper. Furthermore, although the connection between accusative case and transitivity has been reflected in Agree-based theories in the form of Burzio's Generalisation but there is nothing inherent to the theory that would lead us to expect it. This is in contrast to dependent case theories which take accusative case to be dependent on the presence of a higher argument, a condition that is naturally only met in transitive clauses. Moreover, ergative case is also connected to transitivity, in that it is only found on transitive subjects in HU.<sup>7</sup> This sort of parallel between ergative and accusative case is once again reminiscent of dependent case theory rather than Agree-based case assignment. One must then wonder whether the facts are better explained under dependent case theory.

The final issue concerns the finiteness condition on nominative case. According to the proposed analysis, the embedded object of a non-finite clause with a dative predicate cannot be accusative since the transitivity condition is not met, nor can it be nominative since the finiteness condition is not met. Yet such sentences are grammatical (19).

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<sup>7</sup>There are also some exceptional instances of intransitive ergative subjects in HU (Butt and King 2004).

- (19) [ Sana=ko **gham** ho-na ] koi baRi baath nahi he.  
 [ SanaDAT sadness be-INF ] some big talk not be.PRS.3SG  
 ‘It’s not a big deal for Sana to feel sad.’

It is possible that this is an example of noun incorporation and that it is not a true counterexample for the current analysis. However, if it is a true counterexample, then we must reconsider the basic empirical premise of the proposed analysis that nominative case is not allowed in non-finite clauses. In fact, it has been suggested in previous works that the finiteness condition may not be on nominative case but rather more generally on certain types of subjects (McFadden and Sundaresan 2011). In this case, we would not need to posit bare accusative case at all as nominative objects should be possible in non-finite clauses.

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