

COMPARATIVES IN HINDI-URDU: PUZZLING OVER ZYAADAA

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(Received 30th June 2013; Revised 26th July 2013)

ABSTRACT

This paper focuses on comparatives in Hindi-Urdu with special emphasis on *zyaadaa*. In addition to presenting the basic means of comparison in Hindi-Urdu, we investigate the issue of implicit versus explicit comparison in the language in detail, and use Kennedy's (2009) tests to show that Hindi-Urdu displays explicit comparison with a covert *-er*. Further, we provide new data showing the interaction of *zyaadaa* with POS, *-er* and *bahut*, which suggest a re-examination of conclusions previously made regarding the nature of *zyaadaa* in Bhatt (2012). Contra Bhatt (2012) who claims that attributive *zyaadaa* in adjectival constructions and (optional) *zyaadaa* in phrasal comparatives has a weak semantics; we argue that *zyaadaa* has a non-redundant semantics. It makes available an 'excessive' reading in adjectival constructions and a 'norm-related' or 'big differential' reading in phrasal comparatives, by introducing a variable which must be bound by a degree operator. We argue that the availability of these additional readings correlates with whether POS binds the degree variable of the adjective or that of *zyaadaa*.

1 INTRODUCTION

Comparatives have been the topic of interest in linguistics circles for various reasons, which include the cross linguistic variation in modes of comparison – overt versus covert morphology, implicit versus explicit comparison. In this paper, we examine comparative constructions in Hindi-Urdu. We begin with an overview of the different types of comparatives that are available in the language.

In Hindi-Urdu, all major syntactic categories, viz. noun, verb, adverb and (predicative) adjective can express comparison using similar means, as shown in (1), (2), (3) and (4) respectively. The comparative in Hindi-Urdu is expressed by the use of the *-se* marked standard phrase in combination with the degree word *zyaadaa*. While *zyaadaa* is obligatory in nominal, verbal, and adverbial comparatives, it is optional with adjectival comparatives.

1. *paaras-ke pas vinod-se zyaadaa kitaabẽ hẽ*
Paaras-GEN near Vinod-THAN much books be.PRS.3PL
'Paras has more books than Vinod.'

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2. *sitaa nina-se zyaadaa šaraab piit-ii hε*
 Sita Nina-THAN much alcohol drink-FSG be.PRS.3SG
 ‘Sita drinks more than Nina.’
3. *ram-ne sita-se zyaadaa jaldi khat likh-aa*
 Ram-ERG sita-than much fast letter.MSG write-PFV.MSG
 ‘Ram wrote the letter faster than Sita.’
4. *bill nina-se (zyaadaa) lamb-aa hε*
 Bill Nina-THAN much tall-MS be.PRS.3S
 ‘Bill is taller than Nina.’

Apart from *-se* type comparatives, Hindi-Urdu also has comparatives of *exceed*-type as illustrated in (5), *compared to*-type in (6) and (7), and correlative type as shown in (8).

5. *boris -k-ii lambaaii nina-se baRhkar hε*
 Boris -GEN-FSG height Nina-than exceed be.PRS.3SG
 ‘Boris’ height is more than Nina’s.’
6. *nina-k-e mukaabl-e(-mē) boris lamb-aa hε*
 Nina-GEN-OBL competition-OBL-LOC Boris tall-MSG be.PRS.3SG
 ‘Compared to Nina, Boris is tall.’
7. *nina-k-e banispat boris lamb-aa hε*
 Nina-GEN-OB comparison Boris tall-MSG be.PRS.3SG
 ‘Compared to Nina, Boris is tall.’
8. *nina jitn-ii lamb-ii hε,*
 Nina how much-FSG tall-FSG be.PRS.3SG
boris us-se (zyaadaa) lamb-aa hε
 Boris that.OBL-THAN much tall-MSG be.PRS.3SG
 ‘Boris is taller than Nina.’

With this overview of comparatives in Hindi-Urdu, in Section 2 we proceed to the problem of implicit versus explicit comparison in the language. Using Kennedy’s (2009) diagnostics of crisp judgements, minimum standard gradable adjectives, and differential measurements, we concur with Bhatt and Takahashi (2011) that Hindi-Urdu has explicit comparison and a covert *-er*.

Our primary concern in this paper is to further evaluate *zyaadaa*. Bhatt and Takahashi (2011) analyse *zyaadaa* as the comparative degree head. Bhatt (2012) re-examines *zyaadaa* and proposes that it is not the comparative head but the introducer of a degree variable. He further claims that *zyaadaa* is one of the licensors of the degree head *-er*, and interacts with it to yield comparative readings. Non-comparative readings can be obtained with *zyaadaa* when it occurs in predicative position, or when it is modified by the degree quantifier *bahut* ‘very/a lot’. In this paper, we re-investigate *zyaadaa* and contend that apart from introducing a degree variable, *zyaadaa* makes available an ‘excessive reading’ in adjectival constructions; and ‘norm-related’ and ‘big differential’ readings in phrasal comparatives. The nature of

degree variables introduced by *zyaadaa* is not uniform. It introduces the degree variable d in the norm-related reading, and $d_{\text{standard differential}}$ in the big-differential reading. We propose that the two readings in phrasal comparatives are obtained via the interaction of the degree variables introduced by *zyaadaa* and the adjective, with the degree operators POS and *-er*. When POS binds the degree variable of the adjective, a norm-related reading is obtained, while the d introduced by *zyaadaa* gets bound by *-er*. On the other hand, when POS binds the degree variable ($d_{\text{standard differential}}$) of *zyaadaa*, we get the big-differential reading. The role of *zyaadaa* in the light of the readings it makes available, is discussed in detail in Section 3. We conclude the paper with a short discussion of further issues in Section 4.

2 IMPLICIT VERSUS EXPLICIT COMPARISON

Following the distinction made in Sapir (1944), Kennedy (2009) defines the two types of comparison as:

- I. **Implicit Comparison**
Establish an ordering between objects x and y with respect to gradable property g using the positive form by manipulating the context in such a way that the positive form true of x and false of y .
- II. **Explicit Comparison**
Establish an ordering between objects x and y with respect to gradable property g using a morphosyntactic form whose conventional meaning has the consequence that the degree to which x is g exceeds the degree to which y is g .

Explicit comparison involves specialised morphology that expresses arbitrary ordering relations. Implicit comparison, on the other hand, involves taking advantage of the inherent context sensitivity of the positive or unmarked form (of the adjective). In this section, we show that Hindi-Urdu is not an implicit comparison language. For this, we employ diagnostics from Kennedy (2009). An implicit comparison like *compared to x , y is g* , asserts that x is g and y is not g . Explicit comparison like *x is more g than y* only requires an asymmetric ordering between two degrees.

Put simply, the tests ask the following question: Does the language have any strategy to produce a good sentence in contexts where implicit comparison is infelicitous (i.e. where one object does not stand out with respect to the other)? If the answer is yes, that means that the strategy used is necessarily one of explicit comparison (just an asymmetric ordering).

2.1 CRISP JUDGEMENT

The positive form of an adjective is vague. It gives rise to borderline cases where it is unclear whether or not property g holds for individual x . It also causes an unwillingness to use the positive form to make distinctions between objects x and y that are extremely close to each other with respect to the degree to which they hold property g (Sorites Paradox²). Following Kennedy (2009), we assume that these features of vagueness are due to the

²The name given to a class of paradoxical arguments, also known as ‘little-by-little’ arguments, which arise as a result of the indeterminacy surrounding the limits of application of the predicates involved. For example, the concept of a *heap* appears to lack sharp boundaries, and, as a consequence of the subsequent indeterminacy surrounding the extension of the predicate *is a heap*, no one grain of wheat can be identified as making the difference between being a *heap* and not a *heap* (Hyde 2011).

conventional meaning of the positive form; in particular, due to the requirement that its argument ‘stand out’ relative to the kind of measurement encoded by the adjective. Since the exact degree required to stand out is not clear, we get borderline cases. The Sorites Paradox arises from the feeling that if x stands out relative to g , a very close y also does so.

In the examples below, note that Hindi-Urdu can express close comparisons even in the absence of overt morphology. This suggests the presence of a covert *-er*.

A 600 word essay and a 200 word essay

Implicit comparison:

9. us nibandh-k-e mukaabl-e ye nibandh
 that essay-GEN-OBL competition.OBL this essay
 lamb-aa hε
 long-MSG be.PRS.3SG
 ‘Compared to that essay, this essay is long.’

Explicit comparison:

10. ye nibandh us nibandh-se (zyaadaa) lamb-aa hε
 this essay that.OBL essay-THAN much long-MSG be.PRS.3SG
 ‘This essay is longer than that essay.’

A 600 word essay and a 597 word essay

Implicit comparison:

11. #us nibandh-k-e mukaabl-e ye nibandh
 that.OBL essay-GEN-OBL competition-OBL this essay
 lamb-aa hε
 long-MSG be.PRS.3SG
 ‘Compared to that essay, this essay is long.’

Explicit comparison:

12. ye nibandh us nibandh-se lamb-aa hε
 this essay that.OBL essay-THAN long-MSG be.PRS.3SG
 ‘This essay is longer than that essay.’

Note that *zyaadaa* can be optionally used in this sentence. However, since the test requires us to check whether the comparative meaning can be expressed without overt morphology, we utilise the version of the sentence without *zyaadaa*. The presence of the comparative meaning in (12) also supports the claim made in Bhatt (2011) that *zyaadaa* is not equivalent to *-er*.

2.2 MINIMUM STANDARD GRADABLE ADJECTIVES

Some adjectives like *wet*, *open*, *bent*, *impure* have a positive form in which the standard of comparison is a *minimum* value on the scale. Thus, *x is bent* is true if x has a non-zero degree of bend. Since the standard of comparison is not context-dependent, a *compared to* constituent should have no semantic effect on the interpretation, and should therefore be infelicitous. This is the case in Hindi-Urdu.

Here we consider two rods, as below:

Rod A



Rod B



Implicit comparison:

13. #A-k-e *mukaabl-e* B *TeRh-aa* *hε*
 A-GEN-OBL competition-OBL B crooked-MSG be.PRS.3SG
 ‘Compared to A, B is bent.’

Explicit comparison:

14. B A-se *TeRhaa* *hε*
 B A-THAN crooked-MSG be. PRS.3SG
 ‘B is more crooked than A.’

2.3 DIFFERENTIAL MEASUREMENTS

Measure phrases have a meaning that allows them to combine directly with a gradable adjective, as in (15) below (Kennedy 2009).

15. [[10cm]] = $\lambda g \in D_{d,et} \lambda x. \max\{d \mid g(d)(x) = 1\} = 10 \text{ cm}$

A MeasureP gives an absolute value as its interpretation. As discussed earlier (section 2.2), minimum standard gradable adjectives require a non-zero degree, and are thus independent of the context. Similarly, composition of a MeasureP with a gradable adjective generates a predicate that is no longer context-dependent, since absolute values remain constant. This predicts that implicit comparison should be impossible in the presence of an MP, but explicit comparison should be possible. Example (16) shows that implicit comparison using the *compared to* phrase *ke mukaable* is barred. In (17) we see that the *-se* type comparative is allowed in this context, thereby confirming that it is an instance of explicit comparison.

Implicit comparison:

16. **lii-k-e* *mukaable* *kim* *10* *centimeter* *lamb-aa* *hε*
 Lii- GEN-OBL comparison Kim 10 centimeter tall-MSG be. PRS.3SG
 *‘Compared to lee, Kim is 10 cm tall.’

Explicit comparison:

17. *kim* *lii-se* *10 cm* *lamb-aa* *hε*
 Kim Lee-THAN 10 cm tall-MSG be.PRS.3SG
 ‘Kim is 10 cm taller than Lee.’

The tests show that Hindi-Urdu shows explicit comparison, encoded by *-se*. The *compared to* phrase *ke mukaable* does not encode comparative meaning; its contribution is limited to setting up a standard or norm for comparison. Hindi-Urdu, thus, is a language with explicit comparison but no overt *-er*. This leaves only the option of a covert *-er*.

3 RE-ANALYSING ZYAADAA

This section is a detailed investigation of *zyaadaa* based on a close reading of Bhatt (2012). Discussing examples from both attributive and predicative *zyaadaa*, we investigate the availability of comparative and non-comparative readings in each instance. Following Kennedy (2001) we assume that “all that is required to evaluate the truth conditions of an adjectival predication [...] is that a relation between two degrees can be established,” such that this involves “the projections of two objects on a scale for comparatives, and the projection of one object on a scale plus the relevant standard-denoting degree in non-comparatives.”

3.1 PREDICATIVE ZYAADAA

In this section, we look at the interaction of predicative *zyaadaa* with nominals and adjectives. For the nominal + predicative *zyaadaa* combination, Bhatt shows that both non-comparative and comparative readings are available, as in (18).

18. (Bhatt 2012)
- | | | | | |
|------------------|--------------|---|----------------|-------------|
| <i>un</i> | <i>din-ō</i> | <i>mehengai</i> | <i>zyaadaa</i> | <i>thii</i> |
| those.OBL | days-PL.OBL | cost.of.living | much | be.PST.FSG |
| Non-comparative: | | ‘In those days the cost of living was high.’ | | |
| Comparative: | | ‘In those days, the cost of living was higher.’ | | |

The interaction of the predicative *zyaadaa* with another nominal *bukhaar* “fever” also yields both the comparative and the non-comparative readings as shown in (19). There seems to be preference for the non-comparative reading. However, further investigation shows that this is not the case. The non-comparative reading emerges as a consequence of comparison with the standard-denoting degree, which is always available contextually. On the other hand, for a comparative reading to be available, we need to introduce an overt element like *un din-ō*. This overt element introduces a degree for comparison. Thus in (19), it seems that it is the absence of an overt element causes the comparative reading to be dispreferred.

19. *bacce-ko* *bukhaar* *zyaadaa* *hε*
 child-DAT fever high/much be-PRS.3SG
 a. Non-comparative/excessive ‘The child has high fever.’
 b. Comparative ‘The child has more fever than...’
 Note: Those who get the non-comparative reading also get the comparative reading, but not vice versa.

Further, we also consider the interaction of predicative *zyaadaa* with adjectives. When predicative *zyaadaa* is used with adjectives, we observe that both the comparative and the non-comparative readings are available. The non-comparative reading in (20) below corresponds to Atif being tall, with a significant difference between his height and the height that is considered the standard for tallness.

20. *aatif* *lamb-aa* *zyaadaa* *hε*
 Atif tall-MSG much be.PRS.3SG
 a. Non-comparative/excessive ‘Atif is very tall.’
 b. Comparative ‘Atif is taller than...’

3.2 ATTRIBUTIVE ZYAADAA

Unlike predicative *zyaadaa*, attributive *zyaadaa* gives a comparative meaning when the degree variable introduced by it is bound by a degree head (covert *-er*), but does not give a non-comparative reading, as shown in (21). Bhatt (2012) claims that the non-comparative reading with attributive *zyaadaa* becomes available only in the presence of the degree quantifier *bahut* ‘very/a lot’, as illustrated in (22). The non-comparative meaning is obtained by the degree modification of *zyaadaa* by *bahut* which “blocks the comparative meaning.”

21. (Bhatt 2012)
- | | | |
|----------------------|--|------------|
| <i>aatif zyaadaa</i> | <i>lamb-aa</i> | <i>hε</i> |
| Atif much | tall-MSG | be.PRS.3SG |
| a. Comparative: | ‘Atif is taller (comparison with someone in the context).’ | |
| b. Non-comparative: | *‘Atif is very tall.’ | |

- 22.
- | | | |
|----------------------------|----------------|------------|
| <i>aatif bahut zyaadaa</i> | <i>lamb-aa</i> | <i>hε</i> |
| Atif very much | tall-MSG | be.PRS.3SG |
| ‘Atif is very tall.’ | | |

However, we note that *bahut* is not always essential to make the non-comparative reading. In a group of eight Hindi-Urdu speakers, we observed that for some speakers, the non-comparative reading b. is available in (23), even without *bahut*. Thus, a blocking (by *bahut*) effect analysis cannot fully capture the presence of the non-comparative reading.

- 23.
- | | | |
|----------------------|--|------------|
| <i>aatif zyaadaa</i> | <i>lamb-aa</i> | <i>hε</i> |
| Atif much | tall-MSG | be.PRS.3SG |
| a. Comparative: | ‘Atif is taller (comparison with someone in the context).’ | |
| b. Non-comparative: | ‘Atif is very tall.’ | |

To recapitulate the section so far, unlike Bhatt who obtains both the comparative and the non-comparative readings for predicative *zyaadaa*, but only the comparative reading for attributive *zyaadaa*, we get comparative and non-comparative readings for both predicative and attributive *zyaadaa*, even without *bahut*. Furthermore, we contend that the so-called non-comparative reading in all of the above cases involves a comparison with the standard, such that the degree to which *x* bears a property *g* exceeds the standard-denoting degree significantly. We, refer to this reading as the “excessive” reading instead of the non-comparative, for a precise characterisation.

The question that arises then is this: What does it mean to get the excessive reading even without *bahut*? Could it mean that *zyaadaa* is semantically non redundant?

Following Bhatt, we assume that like other adjectives, *zyaadaa* comes with a degree variable which needs to be bound. There are three candidates by which it may possibly be bound: POS, (covert) *-er*, or *bahut*. Drawing from von Stechow (1984) and Creswell (1977), Pancheva (2012) defines POS as a degree operator which binds a degree variable. Its meaning is defined as follows:

24. $[[\text{POS}]] = \lambda P \lambda x \exists d [d > d_s \wedge P(x, d)]$

Binding of *zyaadaa*'s degree variable by POS (structure a. below) should give rise to the non-comparative reading. But given the unavailability of this reading in (21), Bhatt rules out this binding by POS. In effect, structure (25a) is equivalent to structure (25b), rendering *zyaadaa* redundant. According to this analysis, the system will disprefer redundancy and choose binding by *-er* rather than POS.

25. a. POS_d*zyaadaa*_dtall_d
 ('x is tall to a high degree i.e. x is tall')
- b. POS_dtall_d
 ('x is tall to a high degree i.e. x is tall')

However, the availability of the excessive reading in our data implies that this cannot be the correct characterization of the POS-*zyaadaa*-adjective interaction. We return to this question in section 4.3. Before that, we discuss the contribution of *zyaadaa* in more detail in Section 3.3.

3.3 OPTIONALITY OF ZYAADAA IN COMPARATIVES

3.3.1 SEMANTIC CONTRIBUTION OF ZYAADAA

In nominal, verbal or adverbial comparatives, *zyaadaa* is obligatory (see Section 2). Since these categories do not have a degree variable, they can form comparatives only when a degree variable is introduced by *zyaadaa*.

In contrast, most adjectival comparatives may optionally be bare, that is without *zyaadaa* as illustrated in (26). According to Bhatt (2012), there is no difference in meaning associated with the presence or absence of *zyaadaa* in such cases.

26. *miina* *aatif-se* (*zyaadaa*) *lamb-ii* *hε*.
 Mina.F Atif-THAN much tall-FSG be.PRS.3SG
 'Mina is taller than Atif.'

However, we seek to demonstrate that the optionality of *zyaadaa* should not be misconstrued as *zyaadaa* being semantically vacuous. To highlight the meaning contributed by *zyaadaa*, let us consider examples (27) and (28) below³. In (27), without overt *zyaadaa*, only the simple comparative reading is available.

³ This is also true of superlatives.

1. ram sab-se zyaada lamba hε
 Ram everyone-ABL much/many tall be-PRES
 'Ram is the tallest (and everyone else is tall w.r.t. standard).'
2. ram sab-se lamba hε
 Ram everyone-ABL tall be-PRES
 'Ram is the tallest (and everyone need not be tall w.r.t. standard).'

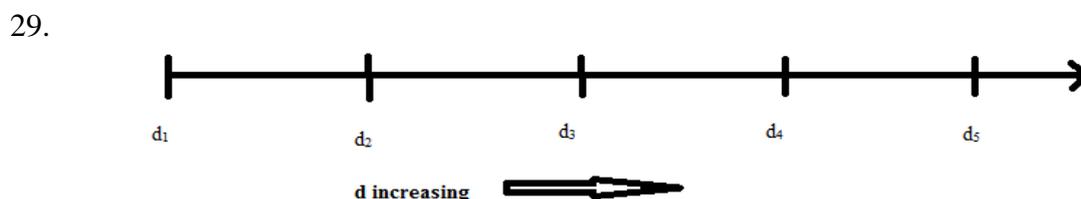
27. *raam mohan-se lamb-aa hε*
 Ram Mohan-THAN tall-MSG be.PRS.3SG
 ‘Ram is taller than Mohan (and neither is necessarily tall w.r.t. standard).’

In contrast, in (28), where *zyaadaa* is overt, we observe that speakers can be split into two groups, depending on the reading(s) that the presence of *zyaadaa* makes available. For one group, only a simple comparative reading is available. In contrast, for the second group, in addition to the simple comparative reading, the presence of *zyaadaa* also makes available a norm-related reading, and a big differential reading. These three readings are illustrated as (a), (b) and (c) in example (28) below.

28. *raam mohan-se zyaadaa lamb-aa hε*
 Ram Mohan-THAN much tall-MSG be.PRS.3SG
 ‘Ram is taller than Mohan
 a. Simple Comparative: Ram is taller than Mohan, and there is no comparison of Ram’s or Mohan’s height with the standard of tallness.
 b. Norm-related: Ram is taller than Mohan, and both Ram and Mohan are tall w.r.t. standard of tallness.
 c. Big differential: Ram is taller than Mohan, the difference between the heights of Ram and Mohan is bigger w.r.t standard differential, and there is no comparison of Ram’s or Mohan’s height with the standard of tallness.’

To clarify these novel interpretations further, in the ‘norm-related reading’, if entities x and y are compared with respect to property g , both x and y bear the property g to a degree $d \geq d_s$. This comparison with d_s is available in addition to the comparison of the degrees to which x and y bear the property g with respect to each other. For speakers who do not get the norm related reading, this means that x and y bear the property g to degree which is not necessarily greater than or equal to d_s ; in other words, there is no comparison with d_s .

The second group of speakers also get the big differential reading, apart from the comparison of the degrees to which x and y bear the property g with respect to each other. In this case, there is no comparison with d_s . Rather, the difference between the degrees to which x and y bear the property g is significant with respect to the standard difference between heights. To understand this, let us look at the figure (29) given below.



On this scale of degrees of a property, $d_5 > d_4 > d_3 > d_2 > d_1$, and therefore $(d_5 - d_1) > (d_4 - d_1) > (d_3 - d_1) > (d_2 - d_1)$. Supposing $(d_2 - d_1)$ is the minimal standard differential to be expected, that is, this is the contextually available $d_{\text{standard differential}} (d_{sd})$, the remaining differentials will exceed this d_{sd} and will be considered big differentials. Thus, we are dealing with degrees that measure the difference between the compared degrees of a property and this corresponds closely to Kennedy’s (2001) proposal that degrees be formalised as intervals on a scale.

This is illustrated further in the example below, where the difference between the heights of Ram (d_r) and Mohan (d_m) exceeds the standard (expected) difference d_{sd} . ($d_r - d_m > d_{sd}$). The value of the standard differential is set with respect to the set of three year olds and is part of the speaker's world knowledge. Again, neither Ram nor Mohan are required to be tall per se.

30. (tiin saal-ke bacc-ō-ke liye)
 three year-GEN.OBL children-PL.OBL-GEN.PL FOR
 ram mohan-se zyaadaa lamb-aa hε
 ram mohan-THAN much tall-MSG be- PRES-3SG
 '(For 3 year old children) Ram is significantly taller than Mohan.'

Therefore, we can see that for a set of speakers the presence of *zyaadaa* makes additional interpretations available. Furthermore, each of these interpretations involves a combination of a comparative reading and a non-comparative reading:

31. Norm related reading: $(d_r > d_m) \wedge ((d_r > d_s) \wedge (d_m > d_s))$
 Big differential reading: $(d_r > d_m) \wedge ((d_r - d_m) > d_s)$

Given the logical equivalence between the points on a scale-based comparison ($d_r > d_m$) and the interval-based comparison ($d_r - d_m > 0$), the comparative and non-comparative meanings can combine in the big differential reading to give us the following formulation: $((d_r - d_m) > d_{sd} > 0)$.

3.3.2 WHO BINDS WHAT?

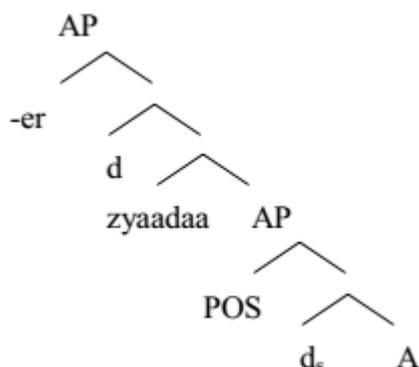
Going back to (28), Bhatt (2012) argues that for the (simple) comparative reading in (28a), which is available to all speakers, the degree variable of the adjective is bound by *-er*. Recall that *zyaadaa* also introduces a degree variable. Since the presence or absence of *zyaadaa* does not affect the availability of this reading, it appears that the degree variable of *zyaadaa* is not part of the semantic derivation for this reading.

In contrast with (28a), the availability of (28b) and (28c) hinges on the presence of *zyaadaa* and its degree variable. Turning first to the norm-related reading (28b), we suggest that the non-comparative (standard) meaning can be understood as d_s (introduced by the adjective *lambaa* 'tall') being bound by the degree operator POS. The question is then how to get the comparative meaning now, since the degree variable of the adjective has already been bound. Differing with Bhatt, we propose that both the degree variables, and not just that of the unmodified adjective, may be bound by degree operators. Thus, if the degree variable d introduced by *zyaadaa* is bound by *-er*, the comparative meaning in this reading will also be derived. The reverse binding, of d_s by *-er*, and of d by POS is untenable.

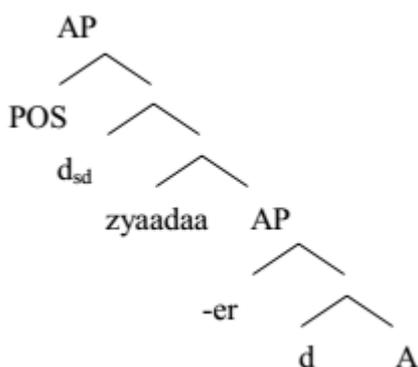
Similarly, the big-differential reading (28c) is obtained due to d_{sd} being bound by POS, giving the non-comparative meaning, and the variable d being bound by *-er*, giving the comparative meaning. We must bear in mind, however, that d_{sd} is not the variable associated with the adjective. Rather, the non-comparative meaning introduced by d_{sd} is actually built on the comparative. Therefore, POS and *-er* will be ordered differently in the big differential reading and in the norm-related reading, thereby giving us different structures for these two interpretations.

The proposed structures for the norm-related reading in (28b) and the big differential reading in (28c) are given in (32) and (33) respectively:

32. Norm-related reading (Ram is taller than Mohan, and both Ram and Mohan are tall w.r.t. the standard of tallness.)



33. Big differential reading (Ram is taller than Mohan, the difference between the heights of Ram and Mohan is bigger w.r.t. the standard differential, and there is no comparison of Ram's or Mohan's height with the standard of tallness.)



Thus, *zyaadaa* is not semantically redundant - it introduces the degree variable d in the norm-related case, and $d_{\text{standard differential}}$ in the big-differential case.

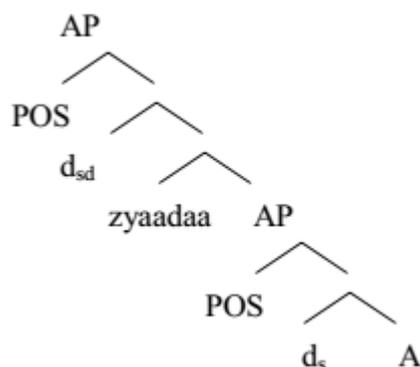
3.3.3 GOING BACK TO ATTRIBUTIVE AND PREDICATIVE ZYAADAA

The above discussion provides us with the means to understand the “excessive reading” associated with predicative and attributive *zyaadaa* in Sections 3.1 and 3.2 more effectively.

The excessive reading too, may be understood as being built up of two readings, both of which are non-comparative. The comparison of the degree of tallness (d) of Atif with the standard of tallness (d_s) can be established if the degree variable of the adjective is bound by POS. *zyaadaa* plays the role of further modifying the $d > d_s$ relation established by POS by contributing the meaning that d exceeds d_s by a significant degree. This is very similar to the big-differential reading, thus allowing us to represent the second non-comparative meaning as the relation $(d - d_s) > d_{sd}$. Since the degree variable of *zyaadaa* is introducing a standard, we assume that a second POS operator binds it.

A structure on the lines of (32) and (33) is given for the excessive reading in (34):

34. Excessive reading



To conclude Section 3, we have demonstrated that *zyaadaa* along with the degree variable it introduces has an important role to play in the semantic interpretation of comparatives. The new interpretations we have discussed arise because of the interaction of the degree variable and the choice of the covert operator – POS or *-er* – binding it.

4 FURTHER ISSUES

In this paper, we have given an overview of comparatives in Hindi-Urdu and provided further evidence for the presence of explicit comparison in the language. Significantly, we have argued for a non-redundant semantics of *zyaadaa* in adjectival constructions and phrasal comparatives. Some issues that need to be explored further are given below.

4.1 LATE MERGER

The *than*-clause has been claimed (Bhatt 2012) to be a licenser of *-er*. However, according to the Late Merger approach (Bhatt and Pancheva 2004); the *than*-clause is merged after the extraposition of *-er*, as its complement. It remains unclear whether it is tenable to posit a licenser being merged *after* the merge of the licensed element (*-er*).

4.2 INTERACTION OF QUANTIFIERS WITH ADJECTIVES IN ATTRIBUTIVE AND PREDICATIVE POSITIONS

Another interesting issue that merits exploration relates to the interaction of quantifiers like *bahut*, *thoRa* and *kaafi* with adjectives. Such a study could be important in light of the data in (35) and (36) below. We observe a split among native speakers of Hindi-Urdu regarding the (un)availability of the big differential reading. As illustrated in (35), for one set of speakers, this reading is available without *bahut*. These speakers also obtain the norm-related reading without *bahut*. However, the second sets of speakers have the big differential reading only when *zyaadaa* is modified by *bahut*, as shown in (36). However, the norm-related reading is missing in the presence of *bahut* for this second set.

35. *raam siitaa-se zyaadaa lamb-aa hε*
 Ram Sita-THAN much tall-MSG be.PRS.3SG
 a. ‘Ram is taller than Sita (and at least one is not tall w.r.t. standard).’
 b. Norm-related: ‘Ram is taller than Sita (and both are tall w.r.t. standard).’
 c. Big differential: ‘The tallness differential is bigger.’ (the differential is big w.r.t. standard differential; but neither Ram nor Sita necessarily have to be tall w.r.t. standard)
36. *raam siitaa-se bahut zyaadaa lamb-aa hε*
 Ram Sita-THAN very/a lot much tall-MSG be.PRS.3SG
 a. ‘Ram is taller than Sita (and at least one is not tall w.r.t. standard).’
 b. *Norm-related: ‘Ram is taller than Sita (and both are tall w.r.t. standard).’
 c. Big differential: ‘The tallness differential is bigger.’ (the differential is big w.r.t. standard differential; but neither ram nor Sita have to be necessarily tall w.r.t. standard)

While (35) and (36) are instances of comparison in the presence of *zyaadaa*, consider (37) without *zyaadaa*, where the modification of the adjective *lambaa* by *bahut* yields the big differential reading.

37. *raam siitaa-se bahut lamb-aa hε*
 Ram Sita-THAN very/a lot tall-MSG be.PRS.3SG
 Ram is very tall as compared to Sita.
 Big differential: ‘The tallness differential is bigger’ (the differential is big w.r.t. standard differential; but neither ram nor Sita have to be necessarily tall w.r.t. standard)

In the light of examples in (35-37), the role of *bahut* in comparatives with or without *zyaadaa* is worth exploring.

The discussion of Hindi-Urdu comparatives and *zyaadaa* in this paper is by no means exhaustive. Many empirical and theoretical issues remain to be explored, which we hope to take up in the future.

ACKNOWLEDGEMENT

The authors express their gratitude to the anonymous reviewers for their comments and suggestions. The present work also benefited from Ayesha Kidwai and Roumyana Pancheva for their useful and insightful discussion of this paper. We wish to thank Ramakant Agnihotri and Utpal Lahiri for their comments and suggestions. We also thank the participants at LISSIM 6 including Sonali Raj, Rajlaxmi Singh, Vineet Chaturvedi, Deepak Kumar, Anne Beshears for the data and judgements.

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