A Movement Approach for Multi-Head Correlatives

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Abstract[1]

The goal of this paper is to provide a semantic analysis of multi-head correlatives in Hindi/Urdu that takes their peculiar behavior regarding NPI licensing and islands into account. This is done by assuming movement, which has the benefit of being a recursive process that can be used for an arbitrary amount of heads without resorting to type shifting or additional rules of composition.

1 The Phenomenon

Correlatives are biclausal structures which consist of a correlative phrase (CorrXP) that contains a relative phrase (RelXP) and a matrix clause that contains a demonstrative phrase (DemXP) referring to what is described by the relative.

(1) jo laṛki: khaṛi: hai vo lambii hai
Rel girl standing.F be.Prs Dem tall.F be.Prs
[[Rel girl]$_{RelXP}$ standing is]$_{CorrXP}$ [she]$_{DemXP}$ tall is
'Which girl is standing, she is tall.' (Srivastav 1991)

These can also come in the form of multi-head correlatives, in which there are two or more pairs of relative and demonstrative items:

(2) jis=ne jo kar-na: cha:h-a us=ne vo ki-ya:
Rel=Erg Rel do-Ger want-Pfv Dem=Erg Dem do-pfv
[[Rel]$_{RelXP1}$ [Rel]$_{RelXP2}$ do want]$_{CorrXP}$ [Dem]$_{DemXP1}$ [Dem]$_{DemXP2}$ do
'Who wanted to do what, that one did that.' (Bhatt 2003)

This seems to be a recursive process, as it allows for arbitrarily many pairs and is still grammatical.

(3) Jo jis=ko jis-se milaata hai vo us=ko us=ka naam bataata hai
Rel Rel=Acc Rel-to introduce be.Prs Dem Dem=Acc Dem=Gen name tell be.Prs
'Who1 introduces who2 to whom3, he1 tells him3 his2 name.'

It is also noteworthy that there seems to be a strict pattern of uniqueness. A single-head correlative always refers to a unique entity. In correlatives with three or more heads, speakers prefer a universal reading, as noted in Brasoveanu (2008). Two headed correlatives depend on context and on the speaker at hand. While some speakers only accept a universal/unique reading, others only accept unique/unique (also noted in Brasoveanu 2008). (2) would allow for these readings:

a. The unique person x wanted to do the unique thing y and x did y. (unique)
b. For all persons x that wanted to do a thing y, x did y. (universal)

But no matter how many heads, the uniqueness effect can be dispelled through plural or habitual marking.

[1] I am deeply indepted to my informants, some of who put in far more patience than could reasonably be expected.

2 Single-Head Correlatives

Regarding the syntax of correlatives, Bhatt (2003) makes a quite convincing argument that in single-head correlatives, the CorrXP is base generated adjoined to the DemXP and then moved, while multi-headed CorrXPs are base generated in an IP adjoined position.

(4)

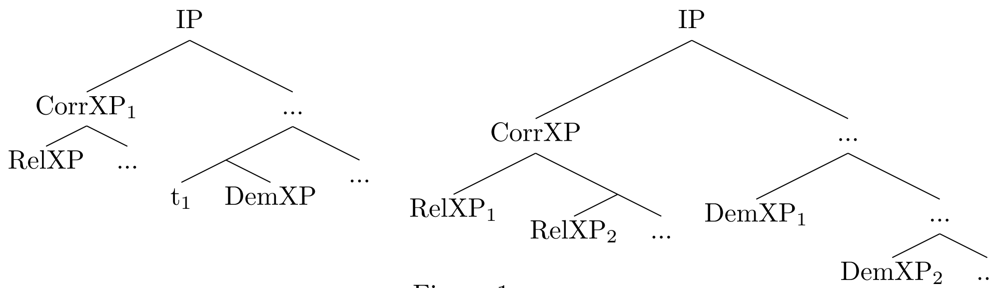

Figure 1

As for the interpretation of these constructions, the assumption is, that, in single-head correlatives, at the level of logical form, a copy of the correlative clause is interpreted in its base position (Bhatt 2003). The resulting LF is then analogous to Elbourne (2005)'s Voldemort phrases, which are named after the currently probably best-known example of these constructions:

(5) He who must not be named.

They are "pronouns combining with restrictive relative clauses to form definite descriptions" (Elbourne 2013), which seems to be an apt description for the structures that we encounter in Hindi/Urdu. My argument will be that single-head correlatives are Voldemort phrases and can be treated exactly like them and that multi-head correlatives try to mimic these structures via movement and use more or less the same machinery.

Elbourne (2013)'s interpretation of these constructions assumes that pronouns consist of two parts: a definite article and an NP that is usually phonologically null. This NP contains only basic information like 'person'. The relative clause that is used to form a Voldemort phrase attaches to this covert NP. This means that the whole Voldemort phrase essentially means "The person who must not be named". Transferring this concept onto the correlative in (1) would give us an LF that roughly looks like this:

(6) Which girl is standing, she is tall.
[The [[NP] [which girl is standing]]] is tall
'The unique standing girl is tall.'

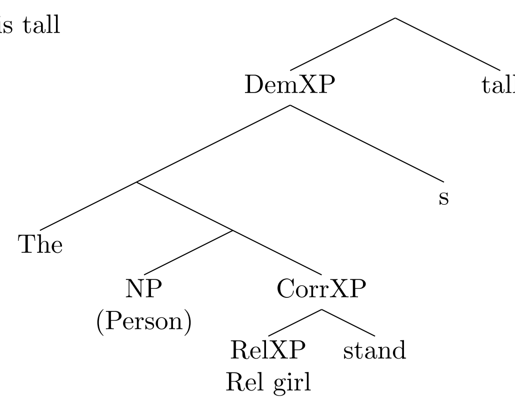

Figure 2

Beshears (2016) independently proposed a very similar analysis for single-head correlatives, in which the pronoun is a demonstrative. Elbourne (2008) assumes that demonstratives are similar to definite descriptions. They create the unique individual that is in a salient relation to some other individual, which is usually provided via extralinguistic means. Beshears (2016) takes the correlative to be an overt representation of the second individual. The resulting LF looks like this:

(7) [R[that [which girl stand]]]tall

This assumes the mechanisms presented in Elbourne (2008) in order to work. In Elbourne (2013), he is "inclined to back-pedal a little" (p.203). However, using the analysis of descriptive indexicals in Elbourne (2013) instead, Beshears (2016)'s analysis can be transferred with next to no changes. The Dem item becomes a pronoun and the CorrXP takes the place of the usually covert, now overt, NP. This seems especially unproblematic for Hindi/Urdu, since it "does not have third person pronouns that are distinct from (distal) demonstratives. Distal demonstratives in Hindi serve as third person pronouns both in their deictic and bound usage" (Bhatt 2003, p.496). The only thing that is lost is the direct integration of the second individual and the relation. But we can follow Elbourne (2013) and assume that the covert NP contains the needed descriptive content that describes this relation. Since Elbourne (2013) assumes that pronouns have to contain a covert NP anyway, we can stick to this and intersect the covert NP with the CorrXP. The LF then changes into this:

(8) [The [[NP][which girl stand]]]tall

This is exactly what the Voldemort analysis produced. It seems safe to assume that, when formalized in the same framework, both analyses are exactly identical. However, analyses of this kind face problems with multi-head correlatives: Since the CorrXP is already base generated adjoined to IP, it cannot be used to form a Voldemort phrase, especially since it would need to be split up into several parts, each of which would need to be adjoined to a different DemXP.

3 Extending to Multi-Head Correlatives

Most existing accounts for Multi-Head Correlatives (Dayal 1995, 1996, Bhatt 2003, Gajewski 2008, among others) assume that at LF, the CorrXP is adjoined to the IP that contains all DemXPs.

(9) Jis larḳi:=ne jis larḳe-ke saath khelaa us=ne us=ko haraayaa
Rel$_1$ girl=Erg Rel$_2$ boy-with play Dem$_1$=Erg Dem$_2$=Acc defeated
'Which girl played with which boy, she defeated him' (Gajewski 2008)

The standard assumption would be that an IP denotes a proposition. Under this assumption, it would be beneficial if the CorrXP had the same denotation. To get this result, it seems sensible to assume that the RelXPs denote individuals. To get this, I will assume that the Rel item is a definite article or a pronoun. Under this assumption, there now are pairs of definite descriptions in the CorrXP and pronouns in the matrix clause, which ideally should refer to the same thing, but currently have no real reason to. The solution is to 'restore' the order that is found in the single-head correlative, namely that of a Voldemort phrase: The DemXPs move on top of the correlative, similar to what has been assumed for South Slavic correlatives in Izvorski (1996). Moving the DemXP has been discounted as a usable analysis for Hindi/Urdu correlatives in Bhatt (2003), but, crucially, only if it involves covert movement over a finite clause boundary. This is not what happens here, since the moved elements get adjoined to IP and stay within the clause. An argument in favor of this comes from structures like the following:

(10) [us=ne jis larḳe=ko jo kita:b di-i]1 [har larḳi soch-ti: hai [ki t1 [us
Dem=Erg Rel boy=Dat Rel book.F give-Pfv.F every girl think-Hab.F be.Prs that Dem
larḳe=ko vo kita:b pasand a:-yegi:]]]
boy=Dat Dem book.F like 'come'-Fut.F
'Every girl$_i$ thinks that for book x, boy y s.t she$_i$ gave x to y, y will like x.' (Bhatt 2003)

In this example, a quantifier in the matrix clause is able to bind a pronoun in the CorrXP. This implies that things can be moved on top of the CorrXP without leaving the finite clause. With this movement, an outline of the LF for (9) would look like this:

(9)

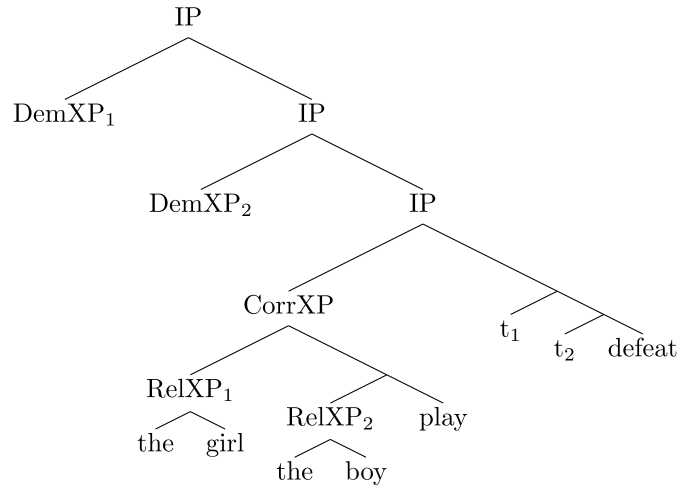

Figure 3

Now, the moved DemXP binds the RelXP, as well as the corresponding trace. C-commanded definite descriptions can be bound in such a way as shown by Wilson (1984) among others. Elbourne (2013) offers a mechanism for this that assumes that they get bound in the same way as donkey anaphoras, namely via situation binding. The meaning of a RelXP now boils down to "The unique girl in the relevant situation", where the movement of the DemXPs binds the situation. For (9), this results in roughly these preliminary truth conditions:

(11) λs. ɩx in s: ɩy in s: (ɩa in s: girl(a) & ɩb in s: boy(b)). x defeated y.
The unique x and y are such that x is the unique girl playing the unique boy y. x defeated y.

This seems to be going in the right direction, but it would be weak crossover. However, as has been noted by Pandit (1985, 1987) among others, Hindi is not that strict regarding these effects:

(12) Raam=ka usake maan baap-se milanaa har larakii=ko acchaa lagataa hai
Ram=Gen her parents-with meeting every girl=Acc please happen be.Prs
'Ram's meeting her parents pleases every girl.' (Pandit 1985)

(13) Harii=kii is gavaahii=ne ki unhonne javaaharaat curaaye the sab=ko
Hari=Gen this statement=Erg that they jewels steal did them=Acc
giraftaar karavaa diyaa
arrested got
'Hari's statement that they had stolen the jewels got all of them arrested.' (Pandit 1987)

Pandit proposes a constraint on crossover constructions for Hindi/Urdu that is a bit weaker than for example in English:

(14) A pronoun cannot be bound to a variable in cross over in Hindi unless the pronoun occurs in an embedded sentence. (Pandit 1987)

Since the bound elements in question are indeed embedded within another CP, this is not a problem.

4 Deriving (Non-)Uniqueness

As mentioned above, in general, single-head correlatives have a unique reading, two heads allow for either unique or universal and three or more heads are read universal. The uniqueness of single head correlatives is unproblematically predicted, since they are essentially definite descriptions. Multi-head correlatives on the other hand are a different breed under this analysis. The keen observer will have noticed that I avoided the topic of how CorrXP and matrix clause are actually combined. I will use the conditional for this. Correlatives have been analyzed as conditionals (and the other way around) before (Arsenijević 2009, Bhatt and Pancheva 1987, Bittner 2001, among others) and some languages such as Lhasa Tibetan (Cable 2005, 2009) even use the conditional marker to also mark correlatives.

But assuming a conditional here will cause a problem: If the DemXPs get raised above the conditional, only the unique reading is still available since the definite article takes scope over the conditional. Additionally, this is not the desired reading but something along the lines of "The unique girl and the unique boy are such that each time they play, she defeats him."

I would instead propose that the DemXPs in multi-head correlatives are not definite descriptions, but instead denote kinds. This is more or less expected if we assume that multi-head correlatives are close relatives of Voldemort phrases. Voldemort phrases can do the same thing as has been shown by Zobel (2015). Her analysis of Voldemort phrases in generic sentences (based on the account for definite singular NPs presented in Dayal 2004), shifts the covert NP and the attached relative clause to a property of kinds. After this, the definite article reduces it to the unique kind. As Zobel (2015) notes, "if a kind-denoting definite singular noun phrase combines with an object-level predicate, the result is a characterizing sentence that expresses a generalization about the members of the kind-entity (cf. Krifka 1995, Chierchia 1998)." To capture this, she uses Chierchia (1998)'s 'member-of' relation. which "holds between an individual y and a kind X in a situation s iff y instantiates X in s, i.e. iff the property of individuals at the core of X is true of y in s."

Finally, the generic operator 'Gen' is applied. I would follow Zobel (2015) in assuming that Gen is a modalized universal quantifier, similar to overt 'usually' or 'normally' (c.f. Krifka 1995, Mari et al. 2013). A complete LF for the universal reading of (9) would look like this:

(15)

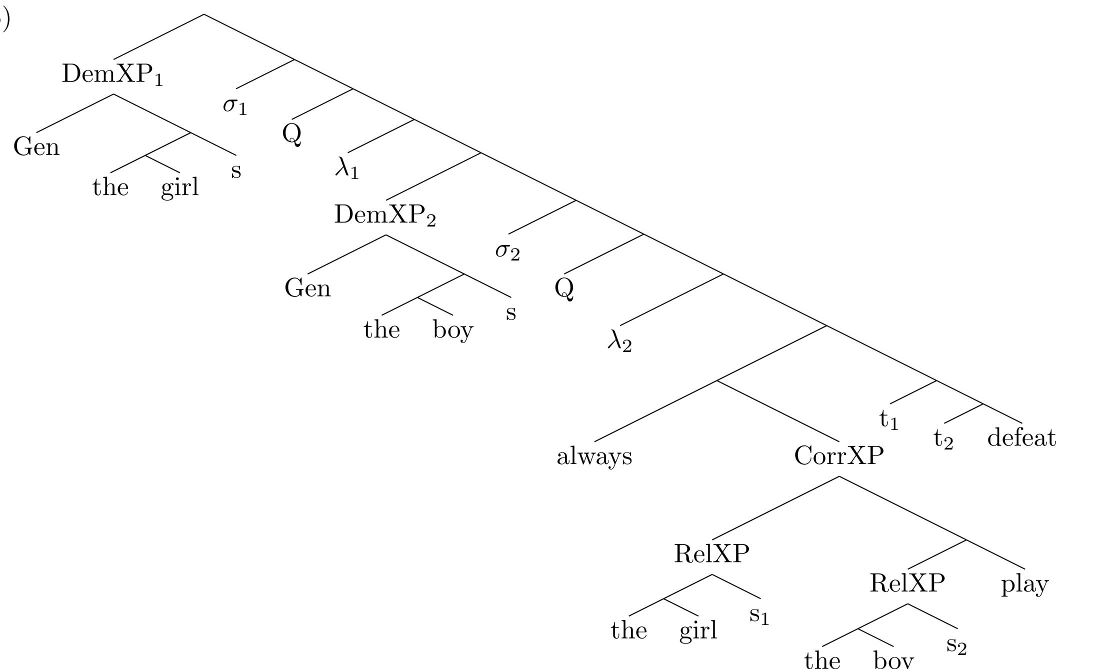

Figure 4

Calculating the RelXPs following Zobel (2015) shifts the NP from property to kind and then applies the definite article. The result is this:

(16) ιX: GIRL(X)

To be able to apply this to the rest, the member-of relation is needed:

(17) λy.λs.member-of(y)(ιX: GIRL(X))(s)

After this, Gen can be applied, resulting in (19)

(18) ⟦Gen⟧=$\lambda f_{<e,st>}.\lambda g_{<e,sst>}.\lambda s.$ ∀s' ∀x [s' is a minimal situation such that s' $\leq$ s and normal in

s and f(x)(s’)$\rightarrow$g(x)(s)(s’)]

(19) λ$g_{<e,sst>}$.λs. ∀s’ ∀x [s’ is a minimal situation such that s’ $\leq$ s and normal in s and x is a normal member of girlkind $\rightarrow$g(x)(s)(s’)]

The conditional will result in something like this:

(20) λs. ∀s’ accessible from s: if the in s_1 unique girl plays the in s_2 unique boy in s’, g(1) defeats g(2) in s’

After predicate abstraction, the conditional gets combined with Q, resulting in (22).

(21) $[\![$Q$]\!]$=λ$f_{<e,st>}$.λx.λs.λs’. ∃s”[s” is a minimal situation such that s’$\leq$ s” and s”$\leq$ s and f(x)(s”)] (Elbourne 2013)

(22) λx.λs.λs’. ∃s”[s” is a minimal situation such that s’$\leq$ s” and s”$\leq$ s and ∀s”’ accessible from s”: if the in s_1 unique girl plays the in s_2 unique boy in s”’, g(1) defeats x in s”’]

The next step is situation binding via the operator σ. This results in (24).

(23) Situation Binding III (Elbourne 2013)
For all indices i and assignments g, $[\![\sigma_i \alpha]\!]^{g}$=λx.λs.λs’.$[\![\alpha]\!]^{g^{s'/i}}$(x)(s)(s’)

(24) λx.λs.λs’. ∃s”[s” is a minimal situation such that s’$\leq$ s” and s”$\leq$ s and ∀s”’ accessible from s”: if the in s_1 unique girl plays the in s’ unique boy in s”’, g(1) defeats x in s”’]

This is now combined with $RelXP_2$

(25) λs. ∀s’ ∀x [s’ is a minimal situation such that s’ $\leq$ s and normal in s and x is a normal member of boykind $\rightarrow$ ∃s”[s” is a minimal situation such that s’$\leq$ s” and s”$\leq$ s and ∀s”’ accessible from s”: if the in s_1 unique girl plays the in s’ unique boy in s”’, g(1) defeats x in s”’]]

Rinse and repeat for $RelXP_1$ and its friends:

(26) λs^{V}.∀s^{VI} ∀y [s^{VI} is a minimal situation such that $s^{VI} \leq s^{V}$ and normal in s^{V} and y is a normal member of girlkind $\rightarrow$ ∃s^{IV}[s^{IV} is a minimal situation such that $s^{VI} \leq s^{IV}$ and $s^{IV} \leq s^{V}$ and ∀s’ ∀x [s’ is a minimal situation such that s’ $\leq s^{IV}$ and normal in s^{IV} and x is a normal member of boykind $\rightarrow$ ∃s”[s” is a minimal situation such that s’$\leq$ s” and s”$\leq s^{IV}$ and ∀s”’ accessible from s”: if the in s^{VI} unique girl plays the in s’ unique boy in s”’, y defeats x in s”’]]]]

This seems right, but requires a bit of cheating: The DemXPs do not actually contain girl or boy out of which one could form a kind. They only contain a null NP. So there is no restriction that would allow us to form a kind. This is less of a problem than one might think, though: Elbourne (2013) assumes that the NP is null because of NP deletion. Deletion like this is only possible if a. the NP is either some irrelevant restriction like person, which is not the case here, or b. if there is a strong visual hint as to its content or c. if there is a usable antecedent. Which there is in form of the corresponding RelXP. We can therefore assume that the DemXP contains a deleted copy of the NP that is in the corresponding RelXP. It should be mentioned though, that the RelXP as well as the DemXP might not contain an overt NP, as is the case in (2) or (3). However, even in these cases, the null NP still contains some information, which might be as basic as a case feature or theta role. But this is actually enough. As long as no two DemXPs create the same kind, everything works and we can use Zobel (2015)’s analysis.

Admittedly, I have deviated from Zobel (2015) in one important aspect, namely in assuming the conditional. However, not doing so would have significant consequences: The conditional is what currently allows us to derive the non-unique reading, since it distributes the uniqueness effect over different situations. Using modification instead would get the following truth conditions:

(27) λs^{V}.∀s^{VI} ∀y [s^{VI} is a minimal situation such that $s^{VI} \leq s^{V}$ and normal in s^{V} and y is a normal member of girlkind $\rightarrow$ ∃s^{IV}[s^{IV} is a minimal situation such that $s^{VI} \leq s^{IV}$ and $s^{IV} \leq s^{V}$ and ∀s’ ∀x [s’ is a minimal situation such that s’ $\leq s^{IV}$ and normal in s^{IV} and x is a normal member of

boykind → ∃s"[s" is a minimal situation such that s'≤ s" and s"≤ s^{IV} and the in s^{VI} unique girl plays the in s' unique boy in s" and y defeats x in s"]]]

This cannot work as a generic sentence anymore, since it states that all normal situations are ones in which exactly one girl plays and defeats exactly one boy. Since it cannot work without it, I will assume that Gen is only licensed if the conditional is present. If we remove Gen, too, we get the following:

(28)

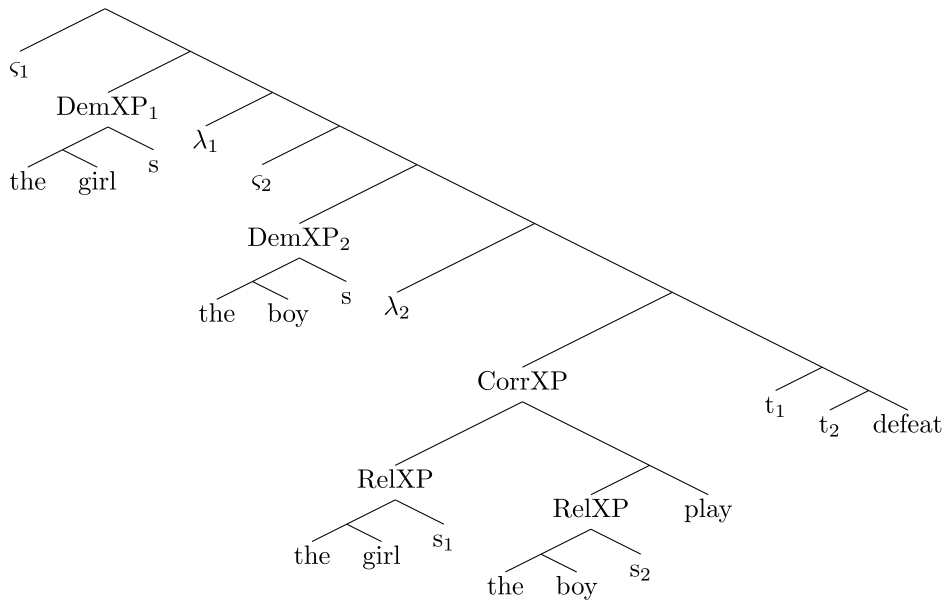

Figure 5

Note that in this tree, σ and Q have vanished, but ς has popped up. This is due to the fact that without Gen, the DemXPs are not quantified anymore, but denote entities. In this case, the machinery for situation binding is slightly different. at the level of λ2, we have the following:

(29) λx.λs. the unique girl in s_1 plays the unique boy in s_2 in s and g(1) defeats x in s

This is combined with the much simpler, non-generic DemXP

(30) λs. the unique girl in s_1 plays the unique boy in s_2 in s and g(1) defeats the unique boy in s

After this, ς is applied, resulting in (29):

(31) Situation Binding I (Elbourne 2013)
For all indices i and assignments g, $[\![\varsigma_i\alpha]\!]^g=\lambda s.[\![\alpha]\!]^{g^{s/i}}(s)$

(32) λs. the unique girl in s_1 plays the unique boy in s in s and g(1) defeats the unique boy in s

Repeat for $DemXP_1$:

(33) λs. the unique girl in s plays the unique boy in s and the unique girl in s defeats the unique boy in s

These are exactly the truth conditions one would expect from the unique reading. Deriving the unique reading is unproblematic, as soon as the DemXPs moved on top of the CorrXP, mimicing a multiple Voldemort phrase. The same structure can derive the non-unique reading. In this case, the DemXPs denote kinds and CorrXP and matrix clause combine via the conditional. Note that my approach currently allows for correlatives with three or more heads to receive a unique reading. This is problematic and I currently have no solution for this problem and am not aware of a solution in the literature.

5 NPI-Licensing

Lahiri (1998) notes that in the CorrXP, NPIs are licensed as in the following example:

(34) jis laṛke=ne jis laṛkii=ko kahiiN bhii dekhaa us laṛke=ne us laṛkii=ko pasand kiyaa
Rel boy=erg Rel girl=Acc anywhere saw Dem boy=Erg Dem girl=Acc like Past
Only: ∀x∀y[boy(x) & girl(y) & x saw y anywhere][x liked y] (Lahiri 1998)

(35) *jis laṛke=ne jis laṛkii=ko dekhaa us laṛkee=ne us laṛkii=ko kahiiN bhii pasand kiyaa
Rel boy=erg Rel girl=Acc saw Dem boy=Erg Dem girl=Acc anywhere like Past
*'Every boy who saw a girl liked her anywhere.' (Lahiri 1998)

Note that while an NPI is present, the only available reading is the non-unique one, which is entirely analogous to the behavior of NPIs in Voldemort phrases. While (36) a. allows for a unique reading that references one specific entity, (36) b. cannot refer to one specific entity anymore, especially not this entity.

(36) a. He who must not be named
b. He who wears any glasses

Lahiri (1998)'s analysis of this pattern in correlatives is that the non-unique reading is due to a distributivity operator that contains a universal quantifier, which licenses NPIs in its first argument. This is equivalent to the conditional that I assume.

However, Lahiri (1998) only provides examples where the NPI is in the CorrXP, but crucially not in the actual RelXP. This is kind of interesting: Some approaches to multi-head correlatives (e.g., Gajewski 2008) construct the CorrXP along the lines of a multi-head free relative, which makes the entirety of it a definite description that outputs a tuple of entities which can then be combined with the multi-place predicate that is the matrix clause. A non-unique reading is derived by applying the pluralization operator * (Link 1983). An analysis like this would not predict that the RelXPs behave differently from the rest of the CorrXP. My approach, on the other hand, would predict that in the actual RelXP an NPI would not be licensed, since the RelXP is a definite description which is a known intervener for NPI licensing (Giannakidou 2006, Guerzoni and Sharvit 2007, Lahiri 1998, among others). This prediction seems to be correct:

(37) *jis kahiiN-ki bhii laṛkii=ne jis laṛke=ke saath khelaa us=ne us=ko haraayaa
Rel anywhere-from girl=erg Rel boy=Acc play with Dem=Erg Dem=Acc defeat
*'Which girl from anywhere plays against which boy, she defeats him'

(38) jis UMass-ki laṛkii=ne jis laṛke=ke saath khelaa us=ne us=ko haraayaa
Rel UMass-from girl=Erg Rel boy=Acc play with Dem=Erg Dem=Acc defeat
'Which girl from UMass plays against which boy, she defeats him'

6 Island Effects

Since this approach relies on movement, it should be able to make predictions specific to that mechanism, i.e. we should be able to produce island effects. It has been argued that in Indoaryan languages such as Hindi/Urdu, covert movement out of finite clauses does not work (Mahajan 1990, Srivastav 1991, Dayal 1996, Bhatt 2003, among others). This means that if one of the DemXPs is embedded in a finite CP, this approach would predict that the sentence becomes ungrammatical. This is (as noted in Bhatt 2003, among others) indeed the case:

(39) *jis=ne jis=ko dekhaa us=ne kah-aa ki vo aa-yega:
Rel=Erg Rel=Acc saw Dem=Erg said that Dem will come
*'Who saw who, he said that he will come.' (via Wali 1982 via Dayal 1996 via Bhatt 2003)

This is straightforwardly predicted by my account and any other that covertly moves the Dem items to the front of the construction. Any non-movement approach (e.g., Dayal 1996, among others) would need to derive the ungrammaticality of these examples differently, for example by assuming that the correlative contains an operator that binds Dem, but can only bind locally (e.g., Dayal 1996). As Bhatt (2003) points out, variable binding does not display island effects, so using an operator for correlatives instead should produce an effect that is crosslinguistically stable, since "operators in natural language not only must bind variables, they must bind them locally" (Dayal 1996, p.185). Evidence against this comes from Cable (2009)'s observations on correlatives in Lhasa Tibetan:

(40) Khyodra=s mogmog gare njos na nga=s de bzo mkhan gyi bsad mkhan de ngozhi
You=Erg Momo what buy if I=Erg that make Agnt Gen kill Agnt the know
gi yod
non.Past Aux
'Which Momos you bought, I know the one who killed the one who made them.'
(Cable 2009)

Even though this is a Single-Head Corelative, it is, as argued for in Cable (2009), not one that was moved, but one that is base generated outside of the clause that contains the DemXP. So the setting seems quite comparable. If we accept Cable (2009)'s analysis that the CorrXP did not originate lower down in the structure and moved upwards, we cannot use an operator that is part of the CorrXP and binds the DemXP, since it cannot be done locally. I am aware that my analysis cannot directly be transferred onto this example either, since it would be a bit implausible to assume that in this scenario, too, the DemXP moves out of the relative clause and on top of the correlative. But what exactly moves or can be moved in a correlative construction may very well be subject to crosslinguistic variation. In the case of Lhasa, it seems more plausible to move the RelXP at LF, but the mechanism in and of itself is still usable.

7 Conclusion

The goal of this paper was to analyze Hindi/Urdu multi-head correlatives as a variant of Voldemort phrases. This seems to be a promising route, since it straightforwardly predicts many of the quirks specific to these constructions, like the unexpected NPI licensing pattern and them seemingly displaying island effects even though the correlative does not move. This is done without positing any machinery specific to the problem. The analysis aims at explaining multi-head correlatives, but can be used for single-head correlatives as well, as shown independently by Beshears (2016). The analysis presented therein differs slightly from the one presented here, but since more or less the same machinery is used, I would consider these approaches equivalent. Future research is as usual needed. Voldemort phrases or their translations behave very differently across languages as shown in Zobel (2015). One would assume that correlatives or correlative-like structures in these languages show corresponding behavior.

(41) He who wears a tie annoys his colleagues (unique/universal)
He who wears any tie annoys his colleagues (universal only)

These sentences are as expected. Compare them with these German (or to be specific: Swabian) translations:

(42) Wer immer mit Krawatte rumrennt (der) nervt seine Kollegen. (universal only)
Who always with tie around.runs (he) annoys his colleagues

(43) Der wo immer mit Krawatte rumrennt (der) nervt seine Kollegen. (unique/universal)
He where always with tie around.runs (he) annoys his colleagues

(44) Wer jemals mit Krawatte rumgerannt ist nervt seine Kollegen. (universal only)
Who ever with tie around.run.Pfv be annoys his colleagues

(45) *Der wo jemals mit Krawatte rumgerannt ist nervt seine Kollegen. (unique/universal)
He where ever with tie around.run.Pfv be annoys his colleagues

Examples like these might provide additional insight into the problem and allow us to see the connection between these phenomena a bit clearer.

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