

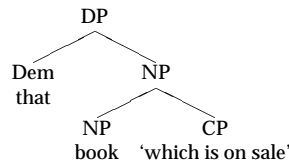
1 Relativization Strategies in Indo-Aryan

1.1 English-type Relative Clauses (ERC)

(1) NP with Relative Clause

[_{DP} vo [_{NP} **kita:b** [_{CP} jo sale-par hai]]] achchhi: hai
 Dem book Rel sale-on be.Prs good.F be.Prs

'That book which is on sale is good.'



The relative clause can also appear in clause-final position.

(2) Right adjoined Relative Clause

[_{DP} vo [_{NP} **kita:b**]] achchhi: hai [_{CP} jo sale-par hai]
 Dem book.F good.F be.Prs Rel sale-on be.Prs

'That book is good which is on sale.'

1.2 Non-finite Relative Clauses

(3) Basic Properties:

- a. Always prenominal
- b. No relative pronouns

Only subjects can be relativized in Hindi non-finite relative clauses:

(4) Prenominal non-finite Relative Clause

a. Perfective participial

[[(Avi-dwaaraa) kal kaat-e] **per**] neem-ke the
 Avi-by yesterday cut-Pfv.Pl tree Neem-Gen.Pl be.Pst.Pl

'The trees cut (by Avi) yesterday were Neem trees.'

b. Imperfective participial

[[chal-ti:] **gari:**]-se mat utro
 move-Impfv.F vehicle.F-from Neg descend-Imp

'Do not descend from the moving vehicle.' (from Hook (1979))

c. Adjectival

mĒ kal [[Ram-ko darshan parha:-ne va:le] **addhya:pak**]-se
 I yesterday Ram-Acc philosophy teach-Ger.Obl Adj.Obl teacher-with
 mil-a:
 meet-Pfv

'I met the teacher who teaches Ram philosophy yesterday.'

Past participial relatives in Marathi allow for a wider variety of positions to be relativized.

(5) Marathi examples from Pandharipande (1997)

a. Relativization of direct Object

[[_{RelCl} tū pāthawleli] **sāḍī**] surekh āhe
 you send-PastPart-sf saree-sf beautiful is

'The saree which you sent is beautiful.'

b. Relativization of a place adverbial

[[_{RelCl} mī rāhāt aslela] **ghar**] khī dzuna āhe
 I live-pres be-PastPart-N.Sg house-N.Sg very old is

'The house in which I am living is very old.'

c. Relativization of subject of a finite sentential complement

[[_{RelCl} rām-ne [pikle āhet] sāNgitlele] **ā:mbe**] āmhī wikat
 Ram-Erg ripe are tell-PastPart-Pl.M mangoes-3Pl.M we buy
 ghetle
 take-Pst-3Pl.M

'We bought the mangoes which Ram told us were ripe.'

1.3 Correlatives

- (6) Basic Components:
- a Correlative Clause that contains (a) Relative Phrase(s)
 - a main clause that contains a Demonstrative Phrase associated with the Correlative Clause
- (7) Simple Correlative:
 $[C_{orCP} \dots Rel-XP_{i \dots}]_i [IP \dots Dem-XP_{i \dots}]$
 [jo sale-par hai] [Maya us CD-ko khari:d-egi:]
 Rel sale-on be.Prs Maya.F Dem CD-Acc buy-Fut.F
 'Maya will buy the CD that is on sale.'
 (Lit. 'What is on sale, Maya will buy that CD.')
- (8) Multi-Head Correlatives:
 $[C_{orCP} \dots Rel-XP_{i \dots} Rel-YP_{j \dots}]_{i,j} [IP \dots Dem-XP_{i \dots} Dem-YP_{j \dots}]$
- Marathi
 [jya mula-ne_i jya muli-la_j pahila]_{i,j} [tya mula-ne_i tya muli-la_j pasant kela]
 Rel boy-Erg Rel girl-Acc saw Dem boy-Erg Dem girl-Acc like did
 'For boy x , girl y s.t. x saw y , x liked y .
 (Lit. [Which boy saw which girl], [that boy liked that girl])
 - Hindi
 [jis-ne_i jo_j kar-na: cha:h-a:]_{i,j} [us-ne_i vo_j ki-ya:]
 Rel-Erg Rel do-Ger want-Pfv Dem-Erg Dem do-Pfv
 'For x , y s.t. x wanted to do y , x did y .
 (Lit. 'Who wanted to do what, he/she did that.')

2 Externally Headed, Internally Headed, and Correlative Clauses

2.1 Externally Headed Relative Clauses

- (9) Basic Components
- S_{rel} (the relative clause) (which contains a relativized position NP_{rel})
 - A domain noun **external** to S_{rel} (= the head NP)

- (10) Things that can vary (cf. Keenan (1985))
- S_{rel} can be prenominal or postnominal
 - The location of the determiner:
 - Det + Head + S_{rel} (English)
 - Head + Det + S_{rel} (Urhobo (Kwa, Nigeria))
 - Head + S_{rel} + Det (Yoruba (Kwa, Nigeria))
 - Det + S_{rel} + Head (German participial relatives)
 - S_{rel} + Det + Head (Korean)
 - S_{rel} + Head + Det (Basque)
 - The internal composition of S_{rel} - finite, infinitival, or participial
 - How the relativization is marked:
 - NP_{rel} is a personal pronoun (Modern Hebrew, Persian)
 - NP_{rel} is a relative pronoun (English, Hindi)
 - NP_{rel} is not present at all (Persian, English, Swedish)

• NP_{rel} cannot be a repetition of the external head in restrictive postnominal embedded externally headed relative clauses.

• Postnominal extraposed externally headed relative clauses and non-restrictive relative clauses allow for repetition of the external head in some languages (Latin, Serbo-Croatian, see Keenan (1985)).

2.2 Internally Headed Relative Clauses

- (11) Basic Components:
- S_{rel} (the relative clause)
 - a domain NP **internal** to S_{rel} (no external head)

Generally S_{rel} is sufficiently nominalized to combine with determiners, case-marking, and adpositions.

- (12) (Tibetan, from Keenan (1985))
 [[PeemE thep khii-pa] **the**] nee yin
 Peem.Erg book.Abs carry-Part the.Abs I.Gen be
 'The book Peem carried is mine.'

- (13) (Diegueño (Hokan, Amerindian), from Keenan (1985))
- ?Ewa:-**pu-L'** ?ciyawx
house-DEF-in I-will-sing
'I will sing in the house.'
 - TEney ?Ewa:φ ?Ewu:w
yesterday house-DO I-saw
'I saw the house yesterday.'
 - [TEney ?Ewa:φ ?Ewu:w]-**pu-L'** ?ciyawx
yesterday house-DO I-saw-DEF-in I-will-sing
'I will sing in the house that I saw yesterday.'

In many languages, the internal head is not explicitly marked. Sometimes this can lead to ambiguity.

- (14) a. (Diegueño, from Keenan (1985))
[XatEkkok-φ wi:-m ?tuc]-pu-c n'^yiL'^y
dog-DO rock-COMITATIVE I-hit-DEF-SUBJ was-black
'The rock I hit the dog with was black'
'The dog I hit with the rock was black.'
- b. (Quechua, from Comrie (1981):139)
[Kan kwitsa-man kwintu-ta willa-shka]-ka llapa sumaj-mi
you girl-to story-Acc tell-NMLZ-TOP very pretty-VALIDATOR
'The girl to whom you told the story is very pretty.'
'The story that you told to the girl is very pretty.'

In others, the internal head may be marked by a relative marker.

- (15) (Bambara (West Africa), from Keenan (1985))
- ne ye so ye
I Pst horse see
'I saw a horse.'
 - tye ye [ne ye **so min**] ye] san
man Pst I Pst horse REL see buy
'The man bought the horse which I saw.'

• Other languages with Internally Headed Relative Clauses: Wappo (Amerindian), Lakhota (cf. Williamson (1987)), Navajo.

• Arguably Free Relatives in English are also Internally Headed Relative Clauses.

2.3 Correlative Clauses

- (16) Basic Components (from Keenan (1985))
[[S_{rel}NP $_{rel}$] [S_{main}NP $_{ana}$]]
- S_{rel} (which contains NP $_{rel}$)
 - S_{main} (which contains an NP $_{ana}$ associated with S_{rel})

The term **correlative** is often reserved for instances where S_{rel} precedes S_{main} .

- (17) Marking of NP $_{rel}$ and NP $_{ana}$
- NP $_{rel}$ is marked in whatever way the language marks NP $_{rel}$ in headed relative clauses.
 - NP $_{ana}$ is marked using one of the means used for marking anaphoricity: personal pronouns, demonstratives, or a special correlative pronoun
 - In certain languages, both NP $_{rel}$ and NP $_{ana}$ may undergo movement to the left edge of their respective clauses (cf. Izvorski (1996) for Bulgarian).

Unlike headed relatives, the 'head' can appear in either S_{rel} or S_{main} , or both.

- (18) (from Srivastav (1991))
- 'head' in S_{rel}
[S_{rel} [jo **lar**kii] kharii hai] [S_{main} [vo] lambii hai]
Rel girl.f standing.f be.Prs.Sg Dem tall.f be.Prs.Sg
'The girl who is standing is tall.' (Lit. which girl is standing, she is tall.)
 - 'head' in S_{main}
[S_{rel} [jo] kharii hai] [S_{main} [vo **lar**kii] lambii hai]
Rel standing.f be.Prs.Sg Dem girl.f tall.f be.Prs.Sg
'The girl who is standing is tall.' (Lit. who is standing, that girl is tall.)
 - 'head' in both S_{rel} and S_{main}
[S_{rel} [jo **lar**kii] kharii hai] [S_{main} [vo **lar**kii] lambii hai]
Rel girl.f standing.f be.Prs.Sg Dem girl.f tall.f be.Prs.Sg
'The girl who is standing is tall.' (Lit. which girl is standing, that girl is tall.)

The following is a non-exhaustive list of languages where correlative clauses are found: Hittite (Berman (1972), Raman (1973)), Warlpiri (Hale (1976), Keenan (1985)), Medieval Russian (Keenan (1985)), Old English (Curme (1912)), South Slavic: Bulgarian, Macedonian, and Serbo-Croatian (Izvorski (1996)), Sanskrit (Andrews (1985)), Dravidian: Kannada (Sridhar (1990)), Malayalam (Asher and Kumari (1997)), and Tamil (Asher (1982)), and the Modern Indo-Aryan languages with the exception of Southern Konkani, Saurashtri,

and Sinhalese: Assamese (Masica (1991)), Bengali (Dasgupta (1980), Bagchi (1994)), Bhojpuri (Grierson (1883), Shukla (1981)), Dakkhini Urdu (Schmidt (1981)), Gujarati (Cardona (1965), Lambert (1971)), Hindi-Urdu (Kachru (1973), Srivastav (1991), Dayal (1996)), Kashmiri (Wali and Koul (1997)), Maithili (Grierson (1883), Yadav (1996)), Marathi (Junghare (1973), Kelkar (1973), Berntsen and Nimbkar (1975), Junghare (1994), Pandharipande (1997)), Nepali (Masica (1991)), Oriya (Sahoo and Hellan (1998)), Punjabi (Bhatia (1993)), Sindhi (Trumpp (1872)).

..in practice the distinction between correlatives and (dislocated) internal RCs is not always easy to make. (Keenan (1985):165)

Perhaps it would be more accurate to say that this correlative construction combines feature of both prenominal and internal-head types, i.e. these two types are not mutually exclusive. (Comrie (1981):139)

3 Differences between Headed Relative Clauses and Correlatives

3.1 Possibilities of an Internal Head

Correlatives allow for the head to appear in both S_{rel} and S_{main} (cf. 18).

3.1.1 Embedded Externally Headed Relative Clauses

Internal Heads are not possible with embedded externally headed relative clauses.

- (19) a. no internal head:
 mujhe [vo **aadmii** [jo Sita-ko pasand hai]] accha: nahī: lag-ta:
 I.Dat that man Rel Sita-Dat like be.Prs.Sg like Neg seem-Hab.MSg
 'I don't like the man who Sita likes.'
- b. with internal head:
 *mujhe [vo **aadmii** [[jo **aadmii**] Sita-ko pasand hai]] accha: nahī:
 I.Dat that man Rel man Sita-Dat like be.Prs.Sg like Neg
 lag-ta:
 seem-Hab.MSg
 'I don't like the man who Sita likes.'

Dialectal variation:

- (20) internal head, no external head (from Mahajan (2000), see Junghare (1994) for parallel Marathi data)

%mujhe [vo [[jo **aadmii**] Sita-ko pasand hai]] accha: nahī: lag-ta:
 I.Dat that man Rel Sita-Dat like be.Prs.Sg like Neg seem-Hab.MSg

'I don't like the man who Sita likes.'

3.1.2 Extraposed Externally Headed Relative Clauses

Extraposed Externally Headed RCs are taken to not allow internal heads (cf. Dayal (1996)).

- (21) a. external head, no internal head:
 mujhe [vo **aadmii**] accha: nahī: lag-ta: [jo Sita-ko pasand
 I.Dat that man like Neg seem-Hab.MSg Rel Sita-Dat like
 hai]
 be.Prs.Sg
 'I don't like the man who Sita likes.'
- b. internal head with external head:
 *mujhe [vo **aadmii**] accha: nahī: lag-ta: [jo **aadmii** Sita-ko pasand
 I.Dat that man like Neg seem-Hab.MSg Rel man Sita-Dat like
 hai]
 be.Prs.Sg
 'I don't like the man who Sita likes.'
- c. internal head with no external head:
 *mujhe vo accha: nahī: lag-ta: [jo **aadmii** Sita-ko pasand
 I.Dat that like Neg seem-Hab.MSg Rel man Sita-Dat like
 hai]
 be.Prs.Sg
 'I don't like the man who Sita likes.'

Dialectal variation:

- (22) internal head with external head (from Mahajan (2000), see also Marlow (1994) and for parallel Marathi data see Junghare (1994))

%mujhe [vo **aadmii**] accha: nahī: lag-ta: [jo **aadmii** Sita-ko pasand
 I.Dat that man like Neg seem-Hab.MSg Rel man Sita-Dat like
 hai]
 be.Prs.Sg

'I don't like the man who Sita likes.'

3.2 The Demonstrative Requirement

3.2.1 Demonstrative Requirement on Correlatives

There must be a demonstrative phrase in the main clause associated with the correlative clause.

- (23) a. Dem + NP_{ana}
 [[jo CD] sale-par hai] [Aamir [vo CD] khari:d-ega:]
 Rel CD sale-on be.Prs Aamir Dem CD buy-Fut.MSG
 'Aamir will buy the CD that is on sale.'
 (Lit. 'Which CD is on sale, Aamir will buy that CD.')
- b. Bare NP_{ana}
 *[[jo CD] sale-par hai] [Aamir [CD] khari:d-ega:]
 Rel CD sale-on be.Prs Aamir CD buy-Fut.MSG
 (Lit. '*Which CD is on sale, Aamir will buy CD.')
- c. Some/Every + NP_{ana}
 *[[jo CD] sale-par hai] [Aamir [koi/har CD] khari:d-ega:]
 Rel CD sale-on be.Prs Aamir some/every CD buy-Fut.MSG
 (Lit. '*Which CD is on sale, Aamir will buy some/every CD.')

Some systematic exceptions to the Dem-XP requirement on Correlatives.

If the DP associated with the Correlative Clause is modified by, or is, *sab/dono/ti:nõ/...* 'all/both/all-three/...' (but not *do/kuchh/adhiktam* 'two/some/most'), then it need not contain a demonstrative.

- (24) [jo laRkiyā: khaRii hĒ] [sab/dono/*do/*kuchh lambii hĒ]
 Rel girls standing.F be.Prs.Pl all/both/two/some tall.F be.Prs.Pl
 'The girls who are standing are all/both/*two/*some tall.'

There are also cases where the Dem-XP that would be associated with the Correlative Clause is not overtly represented in the matrix clause.

- (25) [jo CD sale-par hai] achchha: hai
 Rel CD sale-on be.Prs good.MPl be.Prs
 '[Which CD is on sale] is good.'

3.2.2 No Demonstrative Requirement on Headed Relatives

- (26) Embedded Headed Relative Clause (from Dayal (1996))
 a. Bare NP head:
 [laṛkii [jo khaṛii hai]] lambii hai
 girl.f Rel standing.f be.Prs.Sg tall.f be.Prs.Sg
 'The girl who is standing is tall.'
- b. every + NP head:
 [har [laṛkii [jo khaṛii hai]]] lambii hai
 every girl.f Rel standing.f be.Prs.Sg tall.f be.Prs.Sg
 'Every girl who is standing is tall.'
- (27) Extraposed Headed Relative Clause (from Dayal (1996))
 a. Bare NP head:
 [laṛkii lambii hai] [jo khaṛii hai]
 girl.f tall.f be.Prs.Sg Rel standing.f be.Prs.Sg
 'The girl who is standing is tall.'
- b. every + NP head:
 [har laṛkii] lambii hai [jo khaṛii hai]
 every girl.f Rel standing.f be.Prs.Sg Rel standing.f be.Prs.Sg
 'Every girl who is standing is tall.'

3.3 Multi-Head Relative Clauses

Multi-Head Relative Clauses are only possible with correlatives.

- (28) [jis-ne_i jo_j kar-na: cha:h-a:]_{i,j} [us-ne_i vo_j ki-ya:]
 Rel-Erg Rel do-Ger want-Pfv Dem-Erg Dem do-Pfv
 'For x, y s.t. x wanted to do y , x did y .'
 (Lit. 'Who wanted to do what, he/she did that.')
- (29) a. Extraposed English-type Multi-Head Relative Clause
 * [us laṛki:-ne_i us laṛke-ko_j pasand ki-yaa] [jis-ne_i jis-ko_j dekh-aa]
 Dem girl-Erg Dem boy-Acc like do-Pfv Rel-Erg Rel-Acc see-Pfv
 '*That girl liked that boy, who saw whom.'
- b. Non-extraposed English-type Relative Clause
 impossible to construct

3.4 Stacking

McCawley (2003) notes that while externally headed relative clauses allow for stacking, correlatives do not.

- (30) a. Stacked Headed Relative Clause
 har aadmii [jo mujhe pasand hai] [jise mĒ-ne bulaa-yaa hai]
 every man Rel I.Dat like be.Prs.Sg Rel.Acc I-Erg call-Pfv be.Prs.Sg
 aa-egaa
 come-Fut.MSg
 'Every man [who I like] [who I have called] will come.'
- b. Stacked Correlative
 *[jo mujhe pasand hai] [jise mĒ-ne bulaa-yaa hai] [vo aadmii
 Rel I.Dat like be.Prs.Sg Rel.Acc I-Erg call-Pfv be.Prs.Sg Rel man
 aa-egaa]
 come-Fut.MSg
 (Lit. Who I like, Who I have called, that man will come.)

A related observation is that there is no such thing as a non-restrictive correlative.

3.5 Some Commonalities

If we restrict our attention to within the Correlative Clause CP/ Headed Relative Clause CP, embedded or extraposed, we find that their syntax is substantially identical:

- (31) a. They involve a Relative Phrase that must contain a relative pronoun or determiner.
 b. Relative Pronouns are distinct from Interrogative Pronouns in Indo-Aryan.
 c. There are no null relative operators in finite relative clauses in most Indo-Aryan languages.
- (32) Movement of the Relative Phrase:
 a. If no finite CP boundaries intervene between the Relative Phrase and the target [Spec,CP], the fronting of the Relative Phrase is optional but favored.
 b. If a finite CP boundary intervenes between the Relative Phrase and the target [Spec,CP], the fronting of the Relative Phrase is obligatory.

This is (almost) the pattern found with *wh*-phrases.

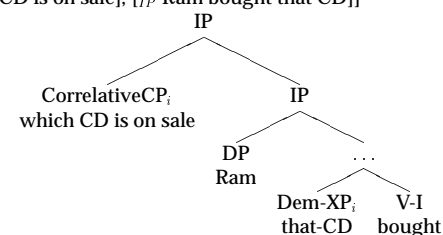
4 Structures for Correlatives

4.1 Structures Proposed for Simple Correlatives

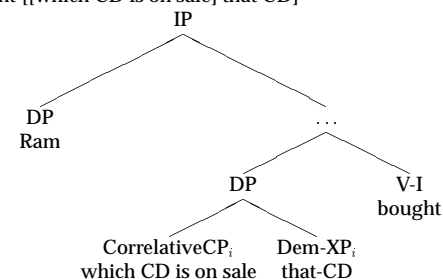
4.1.1 Option 1: Base-generation in an IP-adjoined Position

Argued for by Srivastav (1991), Dayal (1996)

- (33) IP adjunction:
 '[_{IP} [which CD is on sale], [_{IP} Ram bought that CD]]'



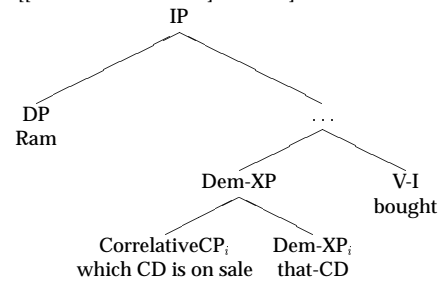
- (34) Dem-XP adjunction
 'Ram bought [[which CD is on sale] that CD]'



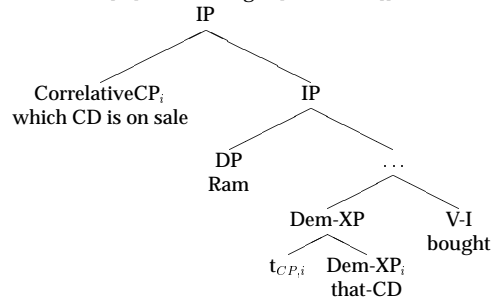
4.1.2 Option 2: Base-generation in an Dem-XP-adjoined Position

Argued for by Bhatt (2003) (see Wali (1982), Bains (1994), Mahajan (2000) for related ideas).

- (35) Dem-XP adjunction
'Ram bought [[which CD is on sale] that CD]'

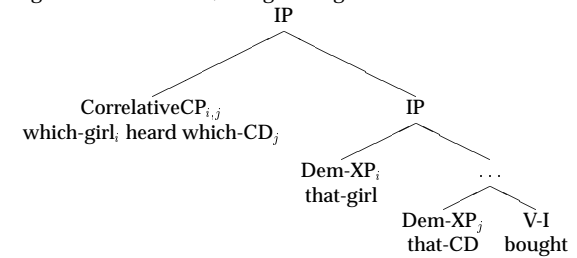


- (36) IP adjunction, via movement:
'[which CD is on sale]_i, [_{IP} Ram bought [_t that-CD_i]]'



4.2 Structures Proposed for Multi-Head Correlatives

- (37) IP adjunction:
'which girl heard which CD, that girl bought that CD'



4.3 The Options

- (38) a. Simple Correlative 1: [_{CP} ... Rel-XP ...]_i [... Dem-XP_i ...]

Option 1: IP adjunction

Option 2: the CP is generated adjoined to [Dem-XP] and moves to the clause-initial position

- b. Simple Correlative 2: ... [[_{CP} ... Rel-XP ...] Dem-XP] ...

Option 1: the CP is generated adjoined to Dem-XP

Option 2: the CP is generated adjoined to Dem-XP

- c. Multi-Head Correlative: [_{CP} ... Rel-XP_i Rel-XP_j...]_{i,j} [... Dem-XP_i Dem-XP_j...]

Option 1: the CP is generated adjoined to IP

Option 2: the CP is generated adjoined to IP

5 Arguments for movement of the Correlative Clause

5.1 Island Effects

The relationship between the Correlative Clause and the Demonstrative Phrase is subject to islands (cf. Srivastav (1991), Bains (1994), Dayal (1996)).

- (39) [Correlative-CP]_i [_{CP finite} Sita thinks that [_{CP finite} ... Dem-XP_i ...]]
 [jo laṛki: TV-par ga: rah-i: hai]_i [Sita soch-ti: hai [_{CP finite} ki vo;
 Rel girl TV-on sing Prog be.Prs Sita.F think-Hab.F be.Prs that Dem
 sundar hai]]
 beautiful be.Prs

'Sita thinks that the girl who is singing on TV is beautiful.'

- (40) * [Correlative-CP]_i [_{IP} ... [_{NP NP} [_{RC} ... Dem-XP_i ...]] ...]
 * [jo vahā: rah-ta: hai]_i mujh-ko [vo kaha:ni: [_{RC} jo Arundhati-ne
 Rel there stay-Hab be.Prs I-Dat that story.F Rel Arundhati-Erg
 us-ke-baare-mē likh-ii]] pasand hai
 Dem-about write-Pfv.F like be.Prs

'*Who lives there, I like the story that Arundhati wrote about that boy.'

- (41) Variable binding into a Relative Clause: no island effects
 a. Every boy_i likes [the story [_{RC} that Arundhati wrote about him_i]].
 b. har laṛke-ko_i [vo kaha:ni: [_{RC} jo Arundhati-ne us-ke-baare-mē,
 every boy-Dat that story.F Rel Arundhati-Erg Pron-about
 likh-ii]] pasand hai
 write-Pfv.F like be.Prs
 'Every boy_i likes [the story [_{RC} that Arundhati wrote about him_i]].'

Hence something must be moving. What is this something?

5.1.1 Izvorski (1996): the Dem Phrase moves

- (42) Movement of Dem is obligatory (Bulgarian: from Izvorski (1996))
 a'. [Correlative-Clause]_i [_{IP} Dem-XP_i ... t_i ...]
 a. [Kolkoto pari iska]_i *tolkova*, misli će šte i dam
 how-much money wants Dem-much thinks that will her give-1Sg
 'She thinks that I'll give her as much money as she wants.'
 b'. * [Correlative-Clause]_i [_{IP} ... Dem-XP_i]

- b. * [Kolkoto pari iska]_i misli će šte i dam *tolkova*,
 how-much money wants thinks that will her give-1Sg Dem-much
 (43) * [Correlative-Clause]_i [_{IP} Dem-XP_i ... [_{Island} ... t_i ...]] (Bulgarian)
 * [Kakto im kazah]_i *taka*, čuh [_{NP} sluha [_{CP} će t_i sa
 how them told-1Sg Dem-way heard-1Sg the-rumor that are
 postāpili]]
 done
 'I heard the rumor that they had acted the way I had told them to.'

Putatively movement of Dem Phrase in Hindi would be covert.

5.1.2 No Covert Movement out of Finite Clauses

- (44) *wh*-word in embedded clause
 a'. non-finite clause, wide scope question reading available
 [_{IP} ... [_{NonFiniteClause} ... Wh-XP ...]]
 a. Ram [kis-se mil-na:] cha:h-ta: hai
 Ram who-with meet-Ger want-Hab be.Prs
 'Who does John want to meet?'
 b'. finite clause, wide scope question reading not available
 [_{IP} ... [_{FiniteClause} ... Wh-XP ...]]
 b. Sita jaan-tii hai ki Radha kis-se mil rahi: hai
 Sita know-Hab.F be.Prs that Radha.F who-with meet Prog.F be.Prs
 'Sita knows who Radha is meeting with.'
 Not available: 'Who does Sita know that Radha is meeting with?'
 (45) * XP_i ... [_{CP finite} ... t_{i,LF}]

5.1.3 Overt Movement out of Finite Clauses

- (46) a'. overt movement out of a finite clause is ok
 XP_i ... [_{CP finite} ... t_{XP,overt}]
 a. Lata_i, Sita ja:m-ti: hai [ki Poonam-ko t_i pasand hai]
 Lata Sita know-Hab.F be.Prs that Poonam-Dat like be.Prs
 'Lata, Sita knows that Poonam likes.'
 b'. overt movement out of a Relative Clause Island is not ok
 XP_i ... [_{NP N} [_{RelCl} ... t_i ...]]
 b. *Arundhati-ne, mujh-ko [vo kaha:ni: [_{RelCl} jo t_i likh-ii]] pasand hai
 Arundhati-Erg I-Dat that story.F Rel write-Pfv.F like be.Prs
 '*Arundhati, I like the story that t_i wrote.'

Local Conclusion: it is the correlative clause that is (overtly) moving.

5.2 Constituency and constraints on fronting of the Correlative Clause

5.2.1 Evidence for the [CorrelativeCP Dem-XP] structure from co-ordination

- (47) Rahul nowadays [_{DP}[_{DP}CorCP₁ Dem-XP₁] and [_{DP}CorCP₂ Dem-XP₂]] reading is

Rahul a:jkal [_{DP} [_{DP} [jo kita:b Saira-ne likh-i:]₁ vo₁] aur [_{DP} [jo
Rahul nowadays Rel book.F Saira-Erg write-Pfv.F Dem and Rel
cartoon Shyam-ne bana:-ya:]₂ vo₂]] parh raha: hai
cartoon Shyam-Erg make-Pfv Dem read Prog be.Prs

'Nowadays, Rahul is reading the book that Saira wrote and the cartoon that Shyam made.' (Lit. 'Nowadays, Rahul is reading [[which book that Saira wrote] that (book)] and [[which cartoon that Shyam made] that (cartoon)].')

- (48) Rahul [_{DP}[_{DP}CorCP₁ Dem-XP₁] and [_{DP}CorCP₂ Dem-XP₂]]_j nowadays t_i reading is

Rahul [_{DP} [_{DP} [jo kita:b Saira-ne likh-i:]₁ vo₁] aur [_{DP} [jo cartoon
Rahul Rel book.F Saira-Erg write-Pfv.F Dem and Rel cartoon
Shyam-ne bana:-ya:]₂ vo₂]]_j a:jkal t_j parh raha: hai
Shyam-Erg make-Pfv Dem nowadays read Prog be.Prs

'Nowadays, Rahul is reading the book that Saira wrote and the cartoon that Shyam made.' (Lit. 'Nowadays, Rahul is reading [[which book that Saira wrote] that (book)] and [[which cartoon that Shyam made] that (cartoon)].')

- (49) Extraction out of co-ordinate island

- a'. ???CorCP₁ [Rahul is reading
[_{DP}[_{DP} t_{CP,1} Dem-XP₁] and [_{DP}CorCP₂ Dem-XP₂]]]
a. ??? [jo kita:b Saira-ne likh-i:]₁ [Rahul a:jkal [_{DP} [_{DP} t_{CP,1} vo₁] aur
Rel book.F Saira-Erg write-Pfv.F Rahul nowadays Dem and
[_{DP}[jo cartoon Shyam-ne bana:-ya:]₂ vo₂]] parh raha: hai]
Rel cartoon Shyam-Erg make-Pfv Dem read Prog be.Prs
??? '[which book that Saira wrote]₁, nowadays, Rahul is reading [that (book)]₁
and [[which cartoon that Shyam made] that (cartoon)].'
b'. *CorCP₂ [Rahul is reading
[_{DP} [_{DP}CorCP₁ Dem-XP₁] and [_{DP} t_{CP,2} Dem-XP₂]]]
b. * [jo cartoon Shyam-ne bana:-ya:]₂ [Rahul a:jkal [_{DP} [_{DP} [jo kita:b
Rel cartoon Shyam-Erg make-Pfv Rahul nowadays Rel book.F
Saira-ne likh-i:]₁ vo₁] aur [_{DP} t_{CP,2} vo₂]] parh raha: hai]
Saira-Erg write-Pfv.F Dem and Dem read Prog be.Prs
**[which cartoon that Shyam made]₂, nowadays, Rahul is reading [[which
book that Saira wrote] that (book)] and [t_{CP,2} that (cartoon)].'

5.2.2 Constraints on fronting of the Correlative Clause

- (50) [_{IP} ... [CorCP₁ Dem-XP₁] ... [CorCP₂ Dem-XP₂] ...]

Ram-ne [jo larkaa tumhaare pi:chhe hai]₁ [us larke-ko]₁ [[jo kita:b
Ram-Erg Rel boy your behind is Dem boy-Dat Rel book
Shantiniketan-ne chhaapii thii]₂ [vo kitaab]₂] dii
Shantiniketan-Erg print-Pfv.F was.F Dem book give-Pfv.F

'Ram gave the book that Shantiniketan had published to the boy who is standing behind you.' (lit. Ram gave [[which book Shantiniketan had published] that book] to [[which boy is behind you] that boy].)

- (51) a'. CorCP₁ [_{IP} ... Dem-XP₁ ... [CorCP₂ Dem-XP₂] ...]

a. [jo larka: tumha:re pi:chhe hai]₁ Ram-ne [us larke-ko]₁ [[jo kita:b
Rel boy-Dat your behind be.Prs Ram-Erg Dem boy-Dat Rel book
Shantiniketan-ne chha:pi: thi:]₂ [vo kitaab]₂] dii
Shantiniketan-Erg publish-Pfv.F be.Pst.F Dem book give-Pfv.F

'Ram gave the book that Shantiniketan had published to the boy who is standing behind you.' (lit. [which boy is behind you]₁, Ram gave [that boy]₁ [[which book Shantiniketan had published] that book])

- b'. CorCP₂ [_{IP} ... [CorCP₁ Dem-XP₁] ... [Dem-XP₂] ...]

b. [jo kita:b Shantiniketan-ne chha:pi: thi:]₂ Ram-ne [[jo larkaa
Rel book Shantiniketan-Erg publish-Pfv.F be.Pst.F Ram-Erg Rel boy
tumhaare pi:chhe hai]₁ [us larke-ko]₁ [vo kitaab]₂ dii
your behind is Dem boy-Dat Dem book give-Pfv.F

'Ram gave the book that Shantiniketan had published to the boy who is standing behind you.' (lit. [which book Shantiniketan had published], Ram gave that book to [[which boy is behind you] that boy].)

- (52) a'. *CorCP₁ CorCP₂ [_{IP} ... Dem-XP₁ ... Dem-XP₂ ...]

a. * [jo larka: tumha:re pi:chhe hai]₁ [jo kita:b Shantiniketan-ne
Rel boy-Dat your behind be.Prs Rel book Shantiniketan-Erg
chha:pi: thi:]₂ Ram-ne [us larke-ko]₁ [vo kitaab]₂ dii
publish-Pfv.F be.Pst.F Ram-Erg Dem boy-Dat Dem book give-Pfv.F
intended interpretation is same as (50)

- b'. *CorCP₂ CorCP₁ [_{IP} ... Dem-XP₁ ... Dem-XP₂ ...]

b. * [jo kita:b Shantiniketan-ne chha:pi: thi:]₂ [jo larka: tumha:re
Rel book Shantiniketan-Erg publish-Pfv.F be.Pst.F Rel boy-Dat your
pi:chhe hai]₁ Ram-ne [us larke-ko]₁ [vo kitaab]₂ dii
behind be.Prs Ram-Erg Dem boy-Dat Dem book give-Pfv.F
intended interpretation is same as (50)

- (53) ok: extraction of two arguments out of a clause

- a'. 'topicalization': XP_{i,arg} YP_{j,arg} [CP ... [CP ... t_i ... t_j ...]]
 a. Ram-ne_i Sita-ko_j, Radha soch-ti: hai, ki kai tohfe di-ye
 Ram-Erg Sita-Dat Radha think-Hab.F be.Prs that many presents give-Pfv.Pl
 the
 be.Pst.MPl
 'Radha thinks that Ram gave Sita many presents.'
 b'. 'wh-movement': Wh-XP_{i,arg} Wh-YP_{j,arg} [CP ... [CP ... t_i ... t_j ...]]
 b. kis-ne_i kis-ko_j, Radha soch-ti: hai, ki t_i t_j kai tohfe
 who-Erg who-Dat Radha think-Hab.F be.Prs that many presents
 di-ye the
 give-Pfv.Pl be.Pst.MPl
 'For which *x*, *y*, Radha thinks that *x* gave *y* many presents.'
- (54) ok: extraction of one adjunct out of a clause
 a'. *kahā*:/ 'where': XP_{i,adj} [CP ... [CP ... t_i ...]]
 a. kahā_i, Radha soch-ti: hai, ki Ram-ne Sita-ko tohfe t_i
 where Radha think-Hab.F be.Prs that Ram-Erg Sita-Dat presents
 di-ye the?
 give-Pfv.Pl be.Pst.MPl
 'Where_i does Radha think [that Ram gave presents to Sita t_i]?'
 b'. *kab* / 'when': XP_{i,adj} [CP ... [CP ... t_i ...]]
 b. kab_i, Radha soch-ti: hai, ki Ram-ne Sita-ko tohfe t_i di-ye
 when Radha think-Hab.F be.Prs that Ram-Erg Sita-Dat presents give-Pfv.Pl
 the?
 be.Pst.MPl
 'When_i does Radha think [that Ram gave presents to Sita t_i]?'
- (55) a'. 'where when': XP_{i,adj} YP_{j,adj} [CP ... [CP ... t_i ... t_j ...]]
 a. *kahā_i; kab_j, Radha soch-ti: hai, ki Ram-ne Sita-ko tohfe t_i t_j
 where when Radha think-Hab.F be.Prs that Ram-Erg Sita-Dat presents
 di-ye the?
 give-Pfv.Pl be.Pst.MPl
 '*For which *x*, *y*, Radha thinks [that Ram gave presents to Sita at place *x*, time
y]?'
 b'. 'when where': YP_{j,adj} XP_{i,adj} [CP ... [CP ... t_i ... t_j ...]]
 *kab_j kahā_i, Radha soch-ti: hai, ki Ram-ne Sita-ko tohfe t_i t_j
 when where Radha think-Hab.F be.Prs that Ram-Erg Sita-Dat presents
 di-ye the?
 give-Pfv.Pl be.Pst.MPl
 '*For which *x*, *y*, Radha thinks [that Ram gave presents to Sita at place *x*, time
y]?'

- (56) *Cor-CP₁ Cor-CP₂ [... [t_{1,adjunct} Dem-XP₁] ... [t_{2,adjunct} Dem-XP₂] ...]

5.3 Reconstruction Effects

5.3.1 Condition C effects

- (57) a'. [_{CorCP} ... Name_j ...]_i [[t_i Dem-XP_i] Pron_j ...]
 a. [jo larkii Sita-ko_j pyaar kar-tii hai]_i [us-ne_i us-ko_j thukraa di-yaa]
 Rel girl Sita-Acc love do-Hab.F is Dem-Erg Dem-Acc reject GIVE-Pfv
 'The girl who loves Sita rejected her.'
 b'. * [_{CorCP} ... Name_j ...]_i [Pron_j [t_i Dem-XP_i] ...]
 b. [jo larkii Sita-ko_j pyaar kar-tii hai]_i [us-ne_{k/ksj} us-ko_j thukraa
 Rel girl Sita-Acc love do-Hab.F is Dem-Erg Dem-Acc reject
 di-yaa]
 GIVE-Pfv
 'She rejected the girl who loves Sita.'
 c'. [_{CorCP} ... Name_j ...]_i [[t_i Dem-XP_i] Pron_j ...]
 c. [jo larkii Sita-ko_j pyaar kar-tii hai]_i [us-ko_i us-ne_{j/k} thukraa di-yaa]
 Rel girl Sita-Acc love do-Hab.F is Dem-Acc Dem-Erg reject GIVE-Pfv
 'She rejected the girl who loves Sita.'
 d'. * [_{CorCP} ... Name_j ...]_i [Pron_j [t_i Dem-XP_i] ...]
 d. [jo larkii Sita-ko_j pyaar kar-tii hai]_i [us-ko_{k/ksj} us-ne_i thukraa
 Rel girl Sita-Acc love do-Hab.F is Dem-Acc Dem-Erg reject
 di-yaa]
 GIVE-Pfv
 'The girl who loves Sita rejected her.'

5.3.2 Variable Binding

- (58) a. *His_i mother loves every boy_i.
 b. Every boy_i loves his_i mother.
- (59) a. [His_i band]_j seems to every Austinite_i, [t_j to be the best].
 b. [Someone from his_i class]_j seems to every professor_i, [t_j to be a genius].
 c. [His_i father]_j seems to every boy_i, [t_j to be a genius].
 ((59b, c) are from Fox (2000), pg. 147.)
- (60) a. LF: seems to every Austinite_i, [his_i band to be the best]
 b. LF: seems to every professor_i, [[someone from his_i, class] to be a genius].
 c. LF: seems to every boy_i, [[his_i, father] to be a genius].

- (61) a'. [_{CorCP} ... Pron_i ...]_j [QP_i [t_j Dem-XP_j] ...]
 a. [jis larke-ko vo_i pasand kar-ti: hai]_j [har larke: [t_j [us larke-ko]_j]
 Rel boy-Dat Dem like do-Hab.F be.Prs every girl Dem boy-Dat
 buddhima:n samajh-ti: hai]
 intelligent consider-Hab.F be.Prs
 'Every girl considers the boy who she likes to be intelligent.'

5.3.3 Prediction: Non-reconstruction effects with Multi-Head Correlatives

- (62) a'. [_{MultCorCP} Rel_i Name_j Rel_k ...] [Pron_j Dem-XP_k Dem-XP_i ...]
 a. [jis-ne_i Ram-ko_j jise_k di-yaa] [us-ne_j us-se_k us_i-kii taariif kii]
 Rel-Erg Ram-Acc Rel.Dat give-Pfv Dem-Erg Dem-Inst Dem-Gen.F praise did
 'For *x*, *y* s.t. *x* gave Ram to *y*, Ram praised *x* to *y*.'
 b'. [_{MultCorCP} Rel_i Name_j Rel_k ...] [Pron_j Dem-XP_i Dem-XP_k ...]
 b. [jis-ne_i Ram-ko_j jise_k di-yaa] [us-ne_j us-se_i us_k-kii taariif kii]
 Rel-Erg Ram-Acc Rel.Dat give-Pfv Dem-Erg Dem-Inst Dem-Gen.F praise did
 'For *x*, *y* s.t. *x* gave Ram to *y*, Ram praised *y* to *x*.'
 c'. [_{MultCorCP} Rel_i Name_j Rel_k ...] [Dem-XP_k Pron_j Dem-XP_i ...]
 c. [jis-ne_i Ram-ko_j jise_k di-yaa] [us-ne_k us-se_j us_i-kii taariif kii]
 Rel-Erg Ram-Acc Rel.Dat give-Pfv Dem-Erg Dem-Inst Dem-Gen.F praise did
 'For *x*, *y* s.t. *x* gave Ram to *y*, *y* praised Ram to *x*.'
 d'. [_{MultCorCP} Rel_i Name_j Rel_k ...] [Dem-XP_i Pron_j Dem-XP_k ...]
 d. [jis-ne_i Ram-ko_j jise_k di-yaa] [us-ne_i us-se_j us_k-kii taariif kii]
 Rel-Erg Ram-Acc Rel.Dat give-Pfv Dem-Erg Dem-Inst Dem-Gen.F praise did
 'For *x*, *y* s.t. *x* gave Ram to *y*, *x* praised *y* to Ram.'
 e'. [_{MultCorCP} Rel_i Name_j Rel_k ...] [Dem-XP_k Dem-XP_i Pron_j ...]
 e. [jis-ne_i Ram-ko_j jise_k di-yaa] [us-ne_k us-se_i us_j-kii taariif kii]
 Rel-Erg Ram-Acc Rel.Dat give-Pfv Dem-Erg Dem-Inst Dem-Gen.F praise did
 'For *x*, *y* s.t. *x* gave Ram to *y*, *y* praised Ram to *x*.'
 f'. [_{MultCorCP} Rel_i Name_j Rel_k ...] [Dem-XP_i Dem-XP_k Pron_j ...]
 f. [jis-ne_i Ram-ko_j jise_k di-yaa] [us-ne_i us-se_k us_j-kii taariif kii]
 Rel-Erg Ram-Acc Rel.Dat give-Pfv Dem-Erg Dem-Inst Dem-Gen.F praise did
 'For *x*, *y* s.t. *x* gave Ram to *y*, *x* praised Ram to *y*.'

- (63) * [_{MultCorCP} Pron_i Rel_j Rel_k ...] [QP_i Dem-XP_j Dem-XP_k ...]
 * [us-ne_i jis larke-ko_j jo kita:b_k di-i] [har larki:ne_i us larke-se_j
 Dem-Erg Rel boy-Dat Rel book.F give-Pfv.F every girl-Erg Dem boy-with
 us kita:b_k ke-ba:re-me ba:t ki-i
 Dem book about talk do-Pfv.F

*'For book *x*, boy *y* s.t. she_i gave *x* to *y*, every girl_i talked to *y* about *x*.'

5.3.4 Reconstruction effects with Multi-Head Correlatives

- (64) [_{MultCorCP} Rel_i Rel_j ...] [Bill thinks that [_{IP} ... Dem-XP_i Dem-XP_j ...]]
 a. Option 1: base-generation
 [_{MultCorCP} Rel_i Rel_j ...] [Bill thinks that [_{IP} ... Dem-XP_i Dem-XP_j ...]]
 b. Option 2: Multi-Head Correlative Clause moves up
 [_{MultCorCP} Rel_i Rel_j ...]_k [Bill thinks that [t_k [_{IP} ... Dem-XP_i Dem-XP_j ...]]]
 (65) * [_{MultCorCP} Rel_i Name_j Rel_k ...] [Pron_j thinks that [t_i [Dem-XP_i Dem-XP_k ...]]]
 [jis larke-ne Sita-se_i jis topic ke-baare-me baat ki-i]_i [vo_j/si soch-tii hai
 Rel boy-Erg Sita-with Rel topic about talk did Dem think-Hab.F is
 ki [t_i [vo larkaa us topic par paper likh-egaa]]
 that Dem boy Dem.Obl topic on paper write-Fut
 'For *x*, *y* s.t. *x* talked to Sita_i about topic *y*, she_j/si thinks that *x* will write a paper on topic *y*.'
 (66) [_{MultCorCP} Pron_i Rel_j Rel_k ...]_i [QP_i ... V [t_i [_{CP} Dem-XP_j Dem-XP_k ...]]]
 [us-ne_i jis larke-ko_j jo kita:b_k di-i]_i [har larke soch-ti: hai [ki
 Dem-Erg Rel boy-Dat Rel book.F give-Pfv.F every girl think-Hab.F be.Prs that
 t_i [us larke-ko vo kita:b pasand a:-yegi:]]]
 Dem 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*.'
 (67) * [_{MultCorCP} Rel_i Rel_j ...] [... Dem-XP_i ... V [_{CP} ... Dem-XP_j ...]]
 * [jis-ne_i jis-ko_j dekh-aa] [us-ne_i kah-aa [_{CP} ki vo_j aa-yega:]]
 Rel-Erg Rel-Acc see-Pfv Dem-Erg say-Pfv that Dem come-Fut
 *'For which *x*, *y* s.t. *x* saw *y*, *x* said that *y* will come.' (from Wali (1982) via Dayal (1996))

- (68) [_{CorCP}...Rel-XP_i...Rel-YP_j...]_{i,j} [_{IP}... Dem-XP_i...Dem-YP_j...]
 [jis-ne_i jo_j kar-na: cha:h-a:]_{i,j} [us-ne_i vo_j ki-ya:]
 Rel-Erg Rel do-Ger want-Pfv Dem-Erg Dem do-Pfv
 'For *x*, *y* s.t. *x* wanted to do *y*, *x* did *y*.'
 (Lit. 'Who wanted to do what, he/she did that.')
- (69) [_{CorCP}...Rel-XP_i...Rel-YP_j...]_{i,j} Dem-XP_i Dem-XP_j [_{IP}... t_i...t_j...]
- (70) *Dem-XP_i Dem-XP_j [_{IP}... t_i... V that [_{IP}... t_j...]]

6 Rel-XP Deletion and Asymmetries between Simple and Multi-Head Correlatives

- (71) [*_i(jo) sale par hai] [Lila vo CD khariid-egii]
 Rel sale on be.Prs Lila.F Dem CD buy-Fut.F
 'Lila will buy the CD which is on sale.'
- (72) Rel-XP deletion/omission in simple Gujarati Correlatives (Babu Suthar p.c.)
 a'. [_{CorCP} Rel-XP_i ...]_i [YP Dem-XP_i ...]
 a. [je chokro sita sathe vat kari rahyo che], [ritane te chokro game che]
 Rel boy Sita with talk do Prog is Rita-Dat Dem boy like is
 'Rita likes the boy who is talking to Sita.' (Lit. 'Which boy is talking to Sita, Rita likes that boy.'
 b'. [_{CorCP} ϕ_{RelXP} ...]_i [YP Dem-XP_i ...]
 b. [sita sathe vat kari rahyo che], [ritane te chokro game che]
 Sita with talk do Prog is Rita-Dat Dem boy like is
 'Rita likes the boy who is talking to Sita.' (Lit. '(Who) is talking to Sita, Rita likes that boy.'
- (73) No Rel-XP deletion in Multi-Head Gujarati Correlatives (Babu Suthar p.c.)
 [_{CorCP} *(Rel-XP_i)*(Rel-YP_j) ...]_{i,j} [Dem-XP_i Dem-YP_j ...]
 [je chokrae_i je chokrine_j joi]_{i,j} [te chokrae_i te chokrine_j pasand kari]
 Rel boy-Erg Rel girl-Acc saw Dem boy-Erg Dem girl-Acc like did
 'For *x*, *y* s.t. *x* saw *y*, *x* liked *y*.'
- (74) a. the book [which/ ϕ_i C⁰[+rel] [John read t_i]]
 b. a topic [[on which]/*(on ϕ_i] [John writes t_i]]
- (75) (from Jacobson (1983))
 a. everyman who I like who I know
 b. *everyman who I like ϕ I know

7 Locality of Merge

- (76) a. base-generation in IP adjoined position:
 '[_{IP}[_{CorCP}which CD is on sale]_i [_{IP} Ram bought that-CD_i]]'
 b. base-generation in Dem-XP adjunction, plus movement of Correlative Clause:
 '[which CD is on sale]_i, [_{IP} Ram bought [t_i that-CD_i]]'
- (77) a. base-generation as adjoined to matrix IP
 [_{MultCorCP} Rel_i Rel_j ...][Bill thinks that [_{IP}... Dem-XP_i Dem-XP_j ...]]
 b. base-generated adjoined to embedded IP, followed by movement
 [_{MultCorCP} Rel_i Rel_j ...]_k [Bill thinks that [t_k [_{IP}... Dem-XP_i Dem-XP_j ...]]]

Condition on Local Merge: The structure-building operation of Merge must apply in as *local* a manner as *possible*.

- (78) * [_{CorCP}...Name_j...]_i [Pron_j Dem-XP_i ...]
- (79) a. Base-generation in an IP-adjoined position:
 [_{CorCP}...Name_j...]_i [Pron_j Dem-XP_i ...]
 b. Base-generation in a Dem-XP adjoined position followed by fronting:
 [_{CorCP}...Name_j...]_i [Pron_j [t_i Dem-XP_i] ...]

7.1 Crosslinguistic Comparisons 1: Correlatives in South Slavic

- (80) Movement of Dem is obligatory (Bulgarian: from Izvorski (1996))
 a'. [Correlative-Clause]_i [_{IP} Dem-XP_i ... t_i ...]
 a. [Kolkoto pari iska]_i *tolkova*_i misli če šte i dam t_i
 how-much money wants Dem-much thinks that will her give-1Sg
 'She thinks that I'll give her as much money as she wants.'
 b'. * [Correlative-Clause]_i [_{IP}... Dem-XP_i]
 b. * [Kolkoto pari iska]_i misli če šte i dam *tolkova*_i
 how-much money wants thinks that will her give-1Sg Dem-much
- (81) Dem-XP adjunction is not possible (Bulgarian) [_{IP} XP ... [_{Dem-XP} [Correlative-Clause]_i Dem-XP_i] ...]
 * misli če šte i dam [[Kolkoto pari iska]_i *tolkova*]
 thinks that will her give-1Sg how-much money wants Dem-much
 'She thinks that I'll give her as much money as she wants.'

7.2 Crosslinguistic Comparisons 2: Clitic Left Dislocation

- (82) Modern Greek (from Iatridou (1994))
 ton Kosta, i Maria ton idhe
 DET Kosta/ACC DET Mary/NOM him saw
 'Kosta, Mary saw him.'
- (83) Islands: *DP_i ... [*Istand* ... Clitic_i ...]
 *ton Kosta, sinandisa tin kopela pu ton idhe
 DET Kosta/ACC (I-)met DET girl who him saw
 Lit. Kosta, I met the girl who saw him.'
- (84) a. DP_i [... [*Istand* [*IP* ... Clitic_i ...]]]
 Non-local Merge, No movement, No island violation
 b. *DP_i [... [*Istand* [_{t_i} [*IP* ... Clitic_i ...]]]]
 Local Merge followed by movement, Island violation

8 The Condition on Merge at work: evidence from absent demonstratives

- (85) Omission of Dem-XP leads to ungrammaticality
 [jo laRkii khaRii hai] [Ram *(us-ko) pasand kar-taa hai]
 Rel girl standing.F is Ram Dem-Dat like do-Hab is
 'Ram likes the girl who is standing.'
- (86) Missing Dem-XP
 [jo lar̥ki: khar̥i: hai] lambii hai
 Rel girl standing.F be.Prs tall.F be.Prs
 '[Which girl is standing] is tall.'

Conditions under which overt Dem is not required:

- (87) form(Case(Rel-XP)) = form(Case(Dem-XP)) = ϕ (from Bhatt (1997))
- (88) [jis lar̥ke-ne sports medal jiiit-aa] [* (us-ne) academic medal-bhii jiiit-aa]
 Rel boy-Erg sports medal win-Pfv Dem-Erg academic medal-also win-Pfv
 'The boy who won the sports medal also won the academic medal.'

- (89) Srivastav (1991)'s analysis: [[*CorCP* ...]_i [*IP pro* ...]]
 [jo lar̥ki: khar̥i: hai]_i [*pro*_i lambii hai]
 Rel girl standing.F be.Prs tall.F be.Prs
 '[Which girl is standing] is tall.'
- (90) Free Relative structure for Dem-XP-less Correlatives
 [*IP* [*FR* [*CP* ...] *pro*] is good]
 [*IP* [*FR* [*CP* jo kita:b sale-par hai] *pro*] achchhi: hai]
 Rel book.F sale-on be.Prs good.F be.Prs
 'Lit. [Which book is on sale] is good.'

8.1 Free Relative Fronting vs. Correlative Fronting

- (91) a. *CorCP₁ CorCP₂ [*IP* ... Dem-XP₁ ... Dem-XP₂ ...]
 b. *CorCP₂ CorCP₁ [*IP* ... Dem-XP₁ ... Dem-XP₂ ...]
- (92) a'. CorCP₂ CorCP₁ [*IP* ... Dem-XP₁ ...]
 a. [jo kita:b Shantiniketan-ne chha:pi: thi:]₂ [jo lar̥ka: tumha:re
 Rel book Shantiniketan-Erg publish-Pfv.F be.Pst.F Rel boy-Dat your
 pi:chhe hai]₁ Ram-ne [us lar̥ke-ko]₁ dii
 behind be.Prs Ram-Erg Dem boy-Dat give-Pfv.F
 'Ram gave the book that Shantiniketan had published to the boy who is behind you.'
 (Lit. [Which book Shantiniketan had published]_i [Which boy is standing behind you]_j, Ram gave t_i to [t_j that-boy]_j)
- b'. CorCP₁ CorCP₂ [*IP* ... Dem-XP₁ ...]
 b. [jo lar̥ka: tumha:re pi:chhe hai]₁ [jo kita:b Shantiniketan-ne
 Rel boy-Dat your behind be.Prs Rel book Shantiniketan-Erg
 chha:pi: thi:]₂ Ram-ne [us lar̥ke-ko]₁ dii
 publish-Pfv.F be.Pst.F Ram-Erg Dem boy-Dat give-Pfv.F
 'Ram gave the book that Shantiniketan had published to the boy who is behind you.'
 (Lit. [Which boy is standing behind you]_j [Which book Shantiniketan had published]_i, Ram gave t_i to [t_j that-boy]_j)

8.2 Matching Effects in Multi-Head Correlatives

- (93) $\text{form}(\text{Case}(\text{Rel-XP}_1)) = \text{form}(\text{Case}(\text{Dem-XP}_1))$,
 $\text{form}(\text{Case}(\text{Rel-XP}_2)) = \text{form}(\text{Case}(\text{Dem-XP}_2))$, ...

What differentiates (93) from the matching requirement on Simple Correlatives in (87) is the absence of the = ϕ clause. This can be seen in (94), where it is possible for the Dem-XP_s to be absent even though not all of the case markers on the Dem-XP_s involved are ϕ .

- (94) [_{MultiCorCP} Rel_i ... Rel_j ...] [pro_i ... pro_j ...] (Dayal, p.c.)

[jis-ne_i jo_j chahaa] [(us-ne_i vo_j) kiyaa].
 Rel-Erg Rel want-Pfv Dem-Erg Dem do-Pfv

'People did what they wanted. Lit. Whoever whatever wanted, they did that'

- (95) Structures for Correlatives without Dem-XP_s

a. DP Adjunction Structures:

[_{CorCP} Rel-XP ...]_i [_{IP} YP [t_{i,CP} pro_i ...]]
 [[_{CorCP} Rel-XP ...] pro]_i [_{IP} YP t_i ...]

- b. [_{CorCP} Rel-XP ...]_i [_{IP} YP pro_i ...] (Unavailable)

9 Conclusions and Questions Raised

- (96) a'. [_{CorCP} which woman is in the kitchen ...]_i
 [_{IP} Ram thinks [[t_i that-woman_i] is not in the kitchen]]
 a. [ĵi bai kičan madhe ahe]_i Ram-la waṭṭe ki [[t_i [ti bai]_i]
 Rel woman kitchen in is Ram-Dat thinks that Dem woman
 kičan madhe nahi]
 kitchen in Neg.is
 sensible reading: 'Woman X is in the kitchen, Ram thinks that Woman X is not in the kitchen.'
 contradictory reading: 'Ram thinks that the woman who is in the kitchen is not in the kitchen.'
 b'. Ram thinks [[_{CorCP} which woman is in the kitchen ...]]_i
 [[t_i that-woman_i] is not in the kitchen]]
 b. Ram-la waṭṭe ki [[ĵi bai kičan madhe ahe]_i [[t_i [ti bai]_i]
 Ram-Dat thinks that Rel woman kitchen in is Dem woman
 kičan madhe nahi]
 kitchen in Neg.is
 contradictory reading: 'Ram thinks that the woman who is in the kitchen is not in the kitchen.'

- (97) Bill thinks that the earth is larger than it is.

- (98) (from Heim (1985))

- a. We believed that every problem_i was harder than it_i was.
 b. We expect that every boy_i thinks he_i is brighter than he_i is.

- (99) Ram thinks [[_{CorCP} which woman is (really) in the kitchen ...]]_i
 [[t_i that-woman_i] is not in the kitchen]]

Ram soch-taa hai ki [[jo aurat (sachmuch) rasoi-me hai]_i [[t_i [vo]]
 Ram think-Hab.MSG be.Prs that Rel woman really kitchen-in is Dem
 rasoi-me nahii hai]
 kitchen-in Neg be.Prs

without *sachmuch* 'really': contradictory reading: 'Ram thinks that the woman who is in the kitchen is not in the kitchen.'

with *sachmuch* 'really': sensible reading: 'The woman who is really in the kitchen, Ram thinks that she is not in the kitchen.'

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