Correlative Clauses

1 Three Relativization Strategies

1.1 Externally Headed Relative Clauses

(1) Basic Components
a. $S_{rel}$ (the relative clause) (which contains a relativized position $NP_{rel}$)

b. A domain noun external to $S_{rel}$ (= the head NP)

(2) NP with Relative Clause

\[
\begin{array}{c}
\text{DP} \\
\text{Dem} \\
\text{that} \\
\text{NP} \\
\text{book} \\
\text{CP} \\
\text{‘which is on sale’}
\end{array}
\]

‘That book which is on sale is good.’

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

(3) Right adjoined Relative Clause

\[
\begin{array}{c}
\text{DP} \\
\text{Dem} \\
\text{NP} \\
\text{book} \\
\text{CP} \\
\text{‘which is on sale’}
\end{array}
\]

‘That book is good which is on sale.’

(4) Things that can vary (cf. Keenan (1985))

a. $S_{rel}$ can be prenominal or postnominal

b. The location of the determiner:
   i. Det + Head + $S_{rel}$ (English)
   ii. Head + Det + $S_{rel}$ (Urhobo (Kwa, Nigeria))
   iii. Head + $S_{rel}$ + Det (Yoruba (Kwa, Nigeria))
   iv. Det + $S_{rel}$ + Head (German participial relatives)
   v. $S_{rel}$ + Det + Head (Korean)
   vi. $S_{rel}$ + Head + Det (Basque)

c. The internal composition of $S_{rel}$ - finite, infinitival, or participial

d. How the relativization is marked:
   i. NP$_{rel}$ is a personal pronoun (Modern Hebrew, Persian)
   ii. NP$_{rel}$ is a relative pronoun (English, Hindi)
   iii. 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)).

1.2 Internally Headed Relative Clauses

(5) Basic Components:

a. $S_{rel}$ (the relative clause)

b. a domain NP internal to $S_{rel}$ (no external head)

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

(6) (Tibetan, from Keenan (1985))

\[
[[\text{Pem}{\text{Im}}\text{thee} \text{khi-i-pa} \text{the}] \text{nee} \text{yi}\text{n} \text{Pem}{\text{Im}}\text{book}\text{.Abs carry-Part the Abs I.Gen be}}
\]

‘The book Peem carried is mine.’
In many languages, the internal head is not explicitly marked. Sometimes this can lead to ambiguity.

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

In some languages, the internal head is marked by a relative marker.

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


1.3 Correlative Clauses

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

Simple Correlative:

Multi-Head Correlatives:

Marking of $NP_{rel}$ and $NP_{main}$

a. $NP_{rel}$ is marked in whatever way the language marks $NP_{rel}$ in headed relative clauses.

b. $NP_{main}$ (which contains an $NP_{main}$ associated with $S_{rel}$)
b. NP_{\text{rel}} is marked using one of the means used for marking anaphoricity: personal pronouns, demonstratives, or a special correlative pronoun.

c. In certain languages, both NP_{\text{rel}} and NP_{\text{main}} 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_{\text{rel}} or S_{\text{main}}, or both.

(14) (from Srivastav (1991))

a. ‘head’ in S_{\text{rel}}

\[
[s_{\text{rel}} [jo la\text{rkii}] khar\text{ii} \text{ hai} ] [s_{\text{main}} [vo lambii] \text{ hai} ]
\]

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, she is tall.)

b. ‘head’ in S_{\text{main}}

\[
[s_{\text{rel}} [jo khar\text{ii} \text{ hai} ] [s_{\text{main}} [vo la\text{rkii}] lambii] \text{ hai} ]
\]

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.)

c. ‘head’ in both S_{\text{rel}} and S_{\text{main}}

\[
[s_{\text{rel}} [jo la\text{rkii}] khar\text{ii} \text{ hai} ] [s_{\text{main}} [vo la\text{rkii}] lambii] \text{ hai} ]
\]

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.)


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

2 Differences between Headed Relative Clauses and Correlatives

2.1 Possibilities of an Internal Head

Correlatives allow for the head to appear in both S_{\text{rel}} and S_{\text{main}} (cf. 14).

2.1.1 Embedded Externally Headed Relative Clauses

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

(15) a. no internal head:

\[
\text{mu\text{}jhe [vo aadmii [jo Sita-ko pasand hai]] accha: nahi: I.Dat that man Rel Sita-Dat like be.Prs.Sg like Neg lag-ta: seem-Hab.MSg}
\]

‘I don’t like the man who Sita likes.’

b. with internal head:

\[
*\text{mu\text{}jhe [vo aadmii [[jo aadmii Sita-ko pasand hai]] accha: nahi: I.Dat that man Rel man Sita-Dat like be.Prs.Sg like Neg lag-ta: seem-Hab.MSg}
\]

‘I don’t like the man who Sita likes.’

Dialectal variation ‘Light headed’ relative clauses:

(16) internal head, no external head (from Mahajan (2000), see Junghare (1994)

\[
\text{mu\text{}jhe [vo [jo aadmii Sita-ko pasand hai]] accha: nahi: I.Dat that man Rel Sita-Dat like be.Prs.Sg like Neg lag-ta: seem-Hab.MSg}
\]

‘I don’t like the man who Sita likes.’
2.1.2 Extraposed Externally Headed Relative Clauses

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

(17) a. external head, no internal head:

\[
\text{mujhe [vo aadmii] accha: nahi lag-ta: [jo Sita-ko pasand I.Dat that man like Neg seem-Hab.MSg Rel Sita-Dat like hai] be.Prs.Sg}
\]

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

b. internal head with external head:

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

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

c. internal head with no external head:

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

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

Dialectal variation:

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

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

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

Appositive relative clauses also seem to allow for internal heads:

(19) I read the New Yorker, [which magazine is one of the finest in the country].

(Chris Potts, p.c.)

2.2 The Demonstrative Requirement

2.2.1 Demonstrative Requirement on Correlatives

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

(20) a. Dem + NP<sub>ext</sub>

\[
[\text{[[jo CD sale-par hai] [Aamir [vo CD] kharid-ega:] Rel CD sale-on be.Prs Aamir Dem CD buy-Fut.MSg}]
\]

'Aamir will buy the CD that is on sale.’

(Lit. 'Which CD is on sale, Aamir will buy that CD.’)

b. Bare NP<sub>ext</sub>

\[
[\text{[[jo CD sale-par hai] [Aamir [CD] kharid-ega:] Rel CD sale-on be.Prs Aamir Dem CD buy-Fut.MSg}]
\]

(Lit. 'Which CD is on sale, Aamir will buy CD.’)

c. Some/Every + NP<sub>ext</sub>

\[
[\text{[[jo CD sale-par hai] [Aamir [koi/har CD] kharid-ega:] Rel CD sale-on be.Prs Aamir some/every CD buy-Fut.MSg}]
\]

(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:n˜o/ (all/both/all-three/... (but not do/kuchh/adhiktam 'two/some/most'), then it need not contain a demonstrative.

(21) \[
[\text{[jo laRkiy˜a: khaRii hE] [sab/dono/*do*/kuchh lambii hE]} Rel girls standing.F be.Prs.Pl all/both/two/some tall.F be.Prs.Pl]
\]

'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.

(22) \[
[\text{[jo CD sale-par hai] achochha: hai} Rel CD sale-on be.Prs good.MPl be.Prs]
\]

'Which CD is on sale is good.’

• See Grosu (2002) on a proposal that attempts to derive these restrictions and connect them to facts concerning amount relatives.
2.2.2 No Demonstrative Requirement on Headed Relatives

(23) Embedded Headed Relative Clause (from Dayal (1996))

a. Bare NP head:
\[
\begin{array}{c}
\text{lar.kii} \\
\text{girl.f} \\
\text{jo} \\
\text{Rel} \\
\text{khar.ii} \\
\text{standing.f} \\
\text{hai} \\
\text{be.Prs.Sg} \\
\text{lambii} \\
\text{tall.f} \\
\text{hai} \\
\text{be.Prs.Sg}
\end{array}
\]

lambii be.Prs.Sg'
The girl who is standing is tall.'

b. every + NP head:
\[
\begin{array}{c}
\text{har} \\
\text{every} \\
\text{lar.kii} \\
\text{girl.f} \\
\text{jo} \\
\text{Rel} \\
\text{khar.ii} \\
\text{standing.f} \\
\text{hai} \\
\text{be.Prs.Sg} \\
\text{lambii} \\
\text{tall.f} \\
\text{hai} \\
\text{be.Prs.Sg}
\end{array}
\]

lambii be.Prs.Sg'
Every girl who is standing is tall.'

(24) Extraposed Headed Relative Clause (from Dayal (1996))

a. Bare NP head:
\[
\begin{array}{c}
\text{lar.kii} \\
\text{girl.f} \\
\text{lambii} \\
\text{tall.f} \\
\text{hai} \\
\text{be.Prs.Sg} \\
\text{jo} \\
\text{Rel} \\
\text{khar.ii} \\
\text{standing.f} \\
\text{hai} \\
\text{be.Prs.Sg}
\end{array}
\]

lambii be.Prs.Sg'
The girl who is standing is tall.'

b. every + NP head:
\[
\begin{array}{c}
\text{har} \\
\text{every} \\
\text{lar.kii} \\
\text{girl.f} \\
\text{lambii} \\
\text{Rel} \\
\text{hai} \\
\text{standing.f} \\
\text{jo} \\
\text{be.Prs.Sg} \\
\text{khar.ii} \\
\text{Rel} \\
\text{hai} \\
\text{standing.f} \\
\text{be.Prs.Sg}
\end{array}
\]

lambii be.Prs.Sg'
Every girl who is standing is tall.'

2.3 Multi-Head Relative Clauses

Multi-Head Relative Clauses are only possible with correlatives.

(25) [jis-ne jo, kar-na: cha-h-a],\text{e} [jis-ne, vo ki-yaa] \\
\text{Rel-Erg Rel do-Ger want-Pfv Dem-Erg Dem do-Pfv} \\
\text{For for x, y s.t. x wanted to do y, x did y.} \\
\text{(Lit. 'Who wanted to do what, he/she did that.')} \\
\text{a. Extraposited English-type Multi-Head Relative Clause} \\
\text{* [us lar.kii-ne, us larke-k0, pasand ki-yaa] [jis-ne, jis-k0] \\
\text{Dem girl-Erg Dem boy-Acc like do-Pfv Rel-Erg Rel-Acc} \\
\text{dekh-aa} \\
\text{see-Pfv} \\
\text{‘That girl liked that boy, who saw whom.’} \\
\text{b. Non-extraposited English-type Relative Clause} \\
\text{impossible to construct} \\
\text{McCawley (2004) notes that while externally headed relative clauses allow for} \\
\text{stacking, correlatives do not.}

(27) a. Stacked Headed Relative Clause
\[
\begin{array}{c}
\text{har} \\
\text{every} \\
\text{aadmii} \\
\text{man} \\
\text{jo} \\
\text{Rel} \\
\text{mujhe} \\
\text{I.Dat} \\
\text{pasand} \\
\text{like} \\
\text{hai} \\
\text{be.Prs.Sg} \\
\text{jise} \\
\text{Rel.Acc} \\
\text{m ˜E-ne} \\
\text{I-Erg} \\
\text{bulaa-yaa} \\
\text{call-Pfv} \\
\text{hai} \\
\text{be.Prs.Sg} \\
\text{aa-egaa} \\
\text{come-Fut.MSg}
\end{array}
\]

\text{Every every man [who I like] [who I have called] will come.'}

b. Stacked Correlative
\[
\begin{array}{c}
\text{[jo mujhe pasand hai] [jise mE-ne bulaa-yaa hai] [vo \\
\text{Rel I.Dat like be.Prs.Sg Rel.Acc I-Erg call-Pfv be.Prs.Sg Rel} \\
\text{aadmii aa-egaa] \\
\text{man come-Fut.MSg}
\end{array}
\]

\text{(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.

2.5 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:

(28) 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.

(29) 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 \text{wh}-phrases.
But even so, there are places where the two diverge:

Headed relatives do not permit -ever while free relatives/correlatives do.

(30) a. I'll read [whichever book you ask me to].
    b. *I'll read the book [whichever you ask me to]

Lipták (2005) notes that the relative pronoun amely ‘Rel-which’ can only occur in
headed relatives, not in free relatives/correlatives:

(31) a. headed relative/*free relative:
    Olvasom *(azt a könyvet) [amelyet most vettem]
    read-1Sg that-Acc the book-Acc Rel-which-Acc now bought-1Sg
    ‘I am reading the book that I have just bought.’
    b. correlative:
    [Amelyet most vettem], *azt a könyvet olvasom.
    Rel-which-Acc now bought-1Sg that-Acc the book-Acc read-1Sg

3 Structures for Correlatives

3.1 Structures Proposed for Simple Correlatives

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


(32) IP adjunction:
    ‘[IP [which CD is on sale], [IP Ram bought that CD]]’

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

Argued for by Bhatt (2003) (see Wali (1982), Bains (1994), Mahajan (2000) for re-
lated ideas).
3.2 Structures Proposed for Multi-Head Correlatives

(36) IP adjunction:

\[
\begin{array}{c}
\text{IP} \\
\text{CorrelativeCP,} \\
\text{which CD is on sale} \\
\text{IP} \\
\text{DP} \\
\text{Ram} \\
\text{Dem-XP} \\
\text{bought} \\
\text{t} \\
\text{that-CD}
\end{array}
\]

3.3 The Options

(37) a. Simple Correlative 1: \([CP \ldots \text{Rel-XP} \ldots \text{] [\ldots \text{Dem-XP}]}\ldots\]

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 \ldots \text{Rel-XP} \ldots \text{]} \ldots \text{Dem-XP}]\ldots\]

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

4 Arguments for movement of the Correlative Clause

4.1 Island Effects

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

(38) [Correlative-CP]\_ [Rel-XP] Sita thinks that [Rel-XP, ki Rel girl TV-on sing Prog be.Prs Sita.F think-Hab.F be.Prs that voh sundar hai] Dem beautiful be.Prs

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

(39) * [Correlative-CP]\_ [NP [\ldots \text{Dem-XP}]}\ldots\]

* [jo vah\_ rah\_ ko voh kaha\_ ni: [\ldots \text{Arundhati-ne Rel there stay-Hab be.Prs I-Dat that story:F Rel Arundhati-Erg us-ke-baare-m\_ 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.’

(40) Variable binding into a Relative Clause: no island effects

a. Every boy likes [the story [\ldots \text{Arundhati wrote about him}]].

b. har larke-ko [vo kaha\_ ni: [\ldots \text{Arundhati-ne us-ke-baare-m\_ every boy-Dat that story:F Rel Arundhati-Erg Pron-about likh-ii]} pasand hai write-Pfv.F like be.Prs]

‘Every boy likes [the story [\ldots \text{Arundhati wrote about him}]].’

Hence something must be moving. What is this something?
4.1.1 Izvorski (1996): the Dem Phrase moves

(41) Movement of Dem is obligatory (Bulgarian: from Izvorski (1996))
   a'. [Correlative-Clause] \( [IP \text{ Dem-XP} \ldots t \ldots ] \)
      a. [Kolkoto pari iska] tolkova, miši če 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] \( [IP \ldots \text{Dem-XP} ] \)
      b. * [Kolkoto pari iska] miši če šte i dam tolkova, how-much money wants thinks that will her give-1Sg Dem-much

(42) * [Correlative-Clause] \( [IP \text{ Dem-XP} \ldots [\text{[Coord-} \ldots t \ldots ]] ] \) (Bulgarian)
   * [Kakto im kazah], takal čuh [\( XP \text{ če ţ 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.

4.1.2 No Covert Movement out of Finite Clauses

(43) \( wh \)-word in embedded clause
   a'. non-finite clause, wide scope question reading available
      \( [IP \ldots [\text{[FiniteClause} \ldots Wh-XP \ldots ]] ] \)
      a. Ram [kis-se mil-na:] chah-ta: hai [\( XP \text{ če ţ sa who-with meet-Ger want-Hab be.Prs} \]
         ‘Who does John want to meet?’
   b'. finite clause, wide scope question reading not available
      \( [IP \ldots [\text{[FiniteClause} \ldots Wh-XP \ldots ]] ] \)
      b. Sita jaan-tii hai ki Radha kis-se mil rahi: hai [\( XP \text{ če ţ sa 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?’

(44) * \( XP_1 \ldots [\text{[FiniteClause} \ldots t_{LIP} ] ]

4.1.3 Overt Movement out of Finite Clauses

(45) a’. overt movement out of a finite clause is ok
   \( XP_1 \ldots [\text{[FiniteClause} \ldots XP_{\text{overt} } ] ] \)
   a. Lata, Sita jaan-ti: hai [ki Poonam-ko ţ pasand hai] [\( XP \text{ 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
   \( XP_1 \ldots [\text{[Coord-} \ldots t \ldots ] ] \)
   b. * Arundhati-ne, mujh-ko [vo kaha:ni: [rel \( \text{jo ţ likh-ii] } ] \]
      pasand Arundhati-Erg Dem-I-Dat that story.F Rel write-Pfv.F like be.Prs
      ‘Arundhati, I like the story that you wrote.’

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

4.2 Constituency and constraints on fronting of the Correlative Clause

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

(46) Rahul nowadays \( [IP \text{ [CoordCP} \text{ Dem-XP} ] \ldots ] \) and \( [\ldots \text{CoordCP} \text{ Dem-XP} ] \) reading is
   Rahul ajkal [\( IP \text{ [jo kita:b Saira-ne likh-i:] vo} ] \] aur [\( IP \text{ Rahul nowadays Rel book.F Saira-Erg write-Pfv.F Dem and} \]
   \( [\ldots [\text{CoordCP} \text{ Dem-XP} ] \ldots ] \) parh raha: hai [\( Rel \text{ cartoon Shyam-ne bana:-ya:] vo} ] \]
   Rel 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)].’)

15 16
4.2.2 Constraints on fronting of the Correlative Clause

(49) \[ \text{[} \text{CorCP}_1 \text{[} \text{Dem-XP}_1 \text{]} \ldots \text{[} \text{CorCP}_2 \text{[} \text{Dem-XP}_2 \text{]} \ldots \text{]} \ldots \text{]} \]

Ram-ne [jo larkaa tumharaa pichhe hai], us [larke-kol], ] [jo kitaab Ram-Erg Rel boy your behind is Dem boy-Dat Rel book Shantiniketan-ne chhaapi thi], [vo kitaab], 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.)

(50) a'. \text{CorCP}_1\text{[} \ldots \text{[} \text{CorCP}_2 \text{[} \text{Dem-XP}_1 \text{]} \ldots \text{]} \ldots \text{]} \ldots \text{]} \ldots \text{]}

a. [jo larka: tumhare pichhe hai], Ram-ne [us larke-kol], [jo Rel boy-Dat your behind be.Prs Ram-Erg Dem boy-Dat Rel kita:b Shantiniketan-ne chhaapi: thi], [vo kitaab], dii book 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], Ram gave [that boy], [which book Shantiniketan had published] that book)

b'. \text{CorCP}_2\text{[} \ldots \text{[} \text{CorCP}_3 \text{[} \text{Dem-XP}_1 \text{]} \ldots \text{]} \ldots \text{]} \ldots \text{]} \ldots \text{]}

b. [jo kita:b Shantiniketan-ne chhaapi: thi], Ram-ne [jo Rel book Shantiniketan-Erg publish-Pfv.F be.Pst.F Ram-Erg Rel larkaa tumharae pichhe hai], [us larke-kol], [vo kitaab], boy 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.)

(51) a'. \text{CorCP}_2\text{[} \ldots \text{[} \text{CorCP}_3 \text{[} \text{Dem-XP}_1 \text{]} \ldots \text{]} \ldots \text{]} \ldots \text{]} \ldots \text{]}

a. [jo larka: tumhare pichhe hai], [jo kita:b Shantiniketan-ne Rel boy-Dat your behind be.Prs Rel book Shantiniketan-Erg chhaapi: thi], Ram-ne [us larke-kol], [vo kitaab], publish-Pfv.F be.Pst.F Ram-Erg Dem boy-Dat Dem book give-Pfv.F

intended interpretation is same as (49)
b'. "CorCP₂ CorCP₁ [揶…Dem-XP₁…Dem-XP₂…]"

a'. "topicalization": XP₁≻₂ YP₁≻₂ [CP…[CP… […]…]]

a. Ram-ne Sita-ko₇, Radha soch-ti: hai, ki Ram-ne Sita-Dat Radha think-Hab.F be.Prs that many presents di-ye the give-Pfv.PI be.Pst.MPI
   'Radha thinks that Ram gave Sita many presents.'

b. "wh-movement": Wh-XP₁≻₂ Wh-YP₁≻₂ [CP…[CP… […]…]]

b. kis-ne kis-ko₇, Radha soch-ti: hai, ki Ram-ne Sita-ko₇ Radha think-Hab.F be.Prs that many presents di-ye the give-Pfv.PI be.Pst.MPI
   'For which x, y, Radha thinks that x gave y many presents.'

a'. "where": XP₁≻₉ [CP…[CP… […]…]]

a. kah₉: Radha soch-ti: hai, ki Ram-ne Sita-ko₇ when Radha think-Hab.F be.Prs that Ram-Erg Sita-Dat presents di-ye the? give-Pfv.PI be.Pst.MPI
   'Where does Radha think [that Ram gave presents to Sita t₉]?'

b'. "when": XP₁≻₉ [CP…[CP… […]…]]

b. kah₉, Radha soch-ti: hai, ki Ram-ne Sita-ko₇ when Radha think-Hab.F be.Prs that Ram-Erg Sita-Dat presents di-ye the? give-Pfv.PI be.Pst.MPI
   'When does Radha think [that Ram gave presents to Sita t₉]?'

4.3 Reconstruction Effects

4.3.1 Condition C effects

(56) a'. [CorCP… Name_j…] [Yi Dem-XP₇] Pron_j…

a. [yo larkii Sita-ko₇ pyaar kar-ti: hai], [us-ne₇ us-ko₇ thukraa Rel gir Sita-Acc love do-Hab.F is Dem-Erg Dem-Acc reject di-yaal]
   GIVE-Pfv
   'The girl who loves Sita rejected her.'

b. "when": YP₁≻₉ YP₁≻₉ [CP…[CP… […]…]]

b. kah₉, Radha soch-ti: hai, ki Ram-ne Sita-ko₇ when Radha think-Hab.F be.Prs that Ram-Erg Sita-Dat presents di-ye the?
   'For which x, y, Radha thinks [that Ram gave presents to Sita at place x, time y]?'
4.3.2 Variable Binding

(57) a. *His_{i} mother loves every boy.*
   b. Every boy_{j} loves his_{i} mother.

(58) a. [His_{i} band_{j}] seems to every Austinite_{k} [t_{l} to be the best].
   b. [Someone from his_{i} class_{j}] seems to every professor_{k}, [t_{l} to be a
genius].
   c. [His_{i} father_{j} seems to every boy_{k} [t_{l} to be a genius].

((58b, c) are from Fox (2000), pg. 147.)

(59) a. LF: seems to every Austinite_{k} [his_{i} band_{j} to be the best]
   b. LF: seems to every professor_{k} [someone from his_{i} class_{j} to be a
genius].
   c. LF: seems to every boy_{k} [his_{i} father_{j} to be a genius].

(60) a. [C_{a}C_{b} \ldots \text{Pron}_{i} \ldots], [Q_{P}, [t_{j}, \text{Dem-XP}_{j}] \ldots]
   a. [jis larke-ko vo, pasand kar-ti: hai], [har larki_{i} [t_{j} [us Rel boy-Dat Dem like do-Hab.F be.Prs every girl Dem
   boy-Dat intelligent consider-Hab.F be.Prs
   'Every girl considers the boy who she likes to be intelligent.'

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

(61) a. [us\text{adC}_{a}C_{b} Rel, Name_{j} Rel_{i} \ldots] [\text{Pron}_{j} \text{Dem-XP}_{j}, \text{Dem-XP}_{j} \ldots]
   a. [jis-ne_{i} Ram-ko_{j} jise_{i} di-yaa] [us-ne_{i} us-se_{j}, us-kii Rel-Erg Ram-Acc Rel.Dat give-Pfv Dem-Erg Dem-Inst Dem-Gen.F
taariif kii] praise did
   'For x, y s.t. x gave Ram to y, y praised x to y.'
   b. [us\text{adC}_{a}C_{b} Rel, Name_{j} Rel_{i} \ldots] [\text{Pron}_{j} \text{Dem-XP}_{j}, \text{Dem-XP}_{j} \ldots]
   b. [jis-ne_{i} Ram-ko_{j} jise_{i} di-yaa] [us-ne_{i} us-se_{j}, us-kii Rel-Erg Ram-Acc Rel.Dat give-Pfv Dem-Erg Dem-Inst Dem-Gen.F
taariif kii] praise did
   'For x, y s.t. x gave Ram to y, y praised y to x.'

((62) a'. [us\text{adC}_{a}C_{b} Rel, Name_{j} Rel_{i} \ldots] [\text{Pron}_{j} \text{Dem-XP}_{j}, \text{Dem-XP}_{j} \ldots]
   [QP, \text{Dem-XP}_{j}, \text{Dem-XP}_{j} \ldots]
   a. [jis larke-ko vo, pasand kar-ti: hai], [har larki_{i} [t_{j} [us Rel boy-Dat Dem like do-Hab.F be.Prs every girl Dem
   boy-Dat intelligent consider-Hab.F be.Prs
   'For book x, boy y s.t. she gave x to y, every girl talked to y about x.'
4.3.4 Reconstruction effects with Multi-Head Correlatives

5 Rel-XP Deletion and Asymmetries between Simple and Multi-Head Correlatives
6  Locality of Merge

(75)  a. base-generation in IP adjoined position:
  \[ [IP \{ \text{CD is on sale} \}] [IP \text{ Ram bought that-CD} ]]\]
  b. base-generation in Dem-XP adjunction, plus movement of Correlative
  Clause:
  \[ [\text{CD is on sale}] [IP \text{ Ram bought [t that-CD]}] ]\]

(76)  a. base-generation as adjoined to matrix IP
  \[ \{ \text{Rel } \text{Rel } \ldots [\text{Bill thinks that } \text{Dem-XP} \text{ Dem-XP } \ldots ] \} \]
  b. base-generated adjoined to embedded IP, followed by movement
  \[ \{ \text{Rel } \text{Rel } \ldots [\text{Bill thinks that } [t [IP \text{ Dem-XP } \text{ Dem-XP } \ldots ] ] ] \} \]

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

(77)  \{Correlative-Clause \} [Pron Dem-XP \ldots ]

(78)  a. Base-generation in an IP-adjoined position:
  \[ \{Correlative-Clause \} [Pron Dem-XP \ldots ] \]
  b. Base-generation in a Dem-XP adjoined position followed by fronting:
  \[ \{Correlative-Clause \} [Pron [t Dem-XP] \ldots ] \]

6.1  Crosslinguistic Comparisons 1: Correlatives in South Slavic

(79)  Movement of Dem is obligatory (Bulgarian: from Izvorski (1996))
  a’. [Correlative-Clause]: [IP Dem-XP \ldots t \ldots ]
  a. [Kolkoto pari iska], tolkova misli ce ste i dam t
  how-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]: [IP Dem-XP ]
  b. *[Kolkoto pari iska], misli ce ste i dam tolkova
  how-hom much money wants thinks that will her give-1Sg Dem-much

(80)  Dem-XP adjunction is not possible (Bulgarian) [IP XP \ldots [Dem-XP [Correlative-
  Clause] Dem-XP ] ]
  * misli ce ste i dam [[Kolkoto pari iska], tolkova]
  thinks that will her give-1Sg how-how much money wants Dem-much
  ‘She thinks that I’ll give her as much money as she wants.’

6.2  Crosslinguistic Comparisons 2: Clitic Left Dislocation

(81)  Modern Greek (from Iatridou (1994))
  ton Kosta, i Maria ton idhe
  DET Kosta/ACC DET Mary/NOM him saw
  ‘Kosta, Mary saw him.’

(82)  Islands: * DP \ldots [Iatridou \ldots Clitic \ldots ]
  *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.’

(83)  a. DP \ldots [Iatridou \ldots Clitic \ldots ]
  Non-local Merge, No movement, No island violation
  b. *DP \ldots [Iatridou \ldots t] [IP \ldots Clitic \ldots ]
  Local Merge followed by movement, Island violation

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

(84)  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 to do-Hab is
  ‘Ram likes the girl who is standing.’

(85)  Missing Dem-XP
  [jo laRkii: khaRii: hai] lambii hai
  Rel girl standing.F be.Ps tall.F be.Ps
  ‘Which girl is standing’ is tall.’

Conditions under which overt Dem is not required:

(86)  form(\text{Case(Rel-XP)}) = form(\text{Case(Dem-XP)}) = \phi (from Bhatt (1997))
Ram gave the book that Shantiniketan had published to the boy who is behind you.

(Lit. [Which book Shantiniketan had published] Ram gave to [the boy who is behind you].)

7.2 Matching Effects in Multi-Head Correlatives

What differentiates (92) from the matching requirement on Simple Correlatives in (86) is the absence of the \( \phi \) clause. This can be seen in (93), where it is possible for the Dem-XPs to be absent even though not all of the case markers on the Dem-XPs involved are \( \phi \).

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

7.1 Free Relative Fronting vs. Correlative Fronting

References


