

Correlative topicalization *

The adventures of correlatives in the left periphery

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Abstract

This article takes a close look at correlatives in Hungarian and shows that they display properties of topics, both in the syntax and in the discourse. Concerning their discourse interpretation it will be argued that correlatives in Hungarian are topics, and take part in a discourse structure akin to *simplifying left dislocation*. In the syntax, correlatives are base-generated in the left periphery of the Hungarian clause, followed by a demonstrative element. The relation between the correlative and the demonstrative displays locality effects characteristic of *ordinary topicalization* constructions in case the correlative and the demonstrative are not found in the same clause. These locality effects argue for the optional topic movement of the correlative clause from the left periphery of one clause to that of another.

At the level of cross-linguistic comparison, it will be shown that the structure of Hungarian correlativization shares many of its properties with that in Hindi. Correlatives undergo optional movement in both languages. The most important difference between the two languages concerns the attachment sites of the correlatives. While correlatives adjoin their nominal in the base in Hindi, they are CP-adjoined elements in Hungarian. The paper will argue that the latter is due to the fact that correlativization in this language is solely used as a left-peripheral discourse strategy.

1. Introduction and roadmap

The purpose of this paper is to give a proper analysis of correlative constructions in Hungarian. This will be done in two steps. In the first step, it will be established that correlatives do exist in the language. In the second step, the language specific data from Hungarian will be analyzed and claims concerning the type and structure of Hungarian correlativization will be put forward. It will be shown that the data provide evidence for the existence of a correlativization strategy that is partly *different* from that in Indo-Aryan languages (Srivastav 1991, Dayal 1996 and Bhatt 2003), and constitutes a pattern that has not yet been uncovered about other languages. The peculiarity of Hungarian correlatives is their *topical* discourse function, which in the case of Hungarian is matched with the syntax of *topics* as well. Hungarian correlatives are always merged adjoined to the CP of the clause in which they originate, and may optionally undergo further topicalization from there.

The findings to be presented here are not only relevant to theoretical syntax, but to language typology, too, and at two levels. The first concerns the distribution of correlatives across language types. Up to now, the typological literature attributed correlativization to (loose) *OV-languages*

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(Downing 1973, Keenan 1985). This, however, is in need of an update in the light of Hungarian correlatives, as Hungarian is clearly an VO-language synchronically (Kálmán 1985). The same holds for the entire group of Slavic languages, which also exhibit correlatives according to my survey (see also Izvorski 1996) and which are also VO languages. If the evidence presented in this paper holds water, correlativization is *not* restricted to OV-languages only. Next to this, it will be shown that Hungarian and Hindi-type correlatives are *not* the same in every respect. The differences, however, arguably do *not* stem from a OV-/VO-word order difference, but derive from the discourse nature of these correlatives. So at the second level of typological relevance, the newly found pattern of correlativization points to the direction that correlativization is not uniform across languages. Rather, it is a strategy of relativization that can be employed in various constructions. Languages, depending on their typological properties, can differ in which of these constructions they employ correlatives.

The paper has Hungarian in its focus. The discussion will be confined to *single* correlative clauses (correlatives with one relative expression) throughout. The proper analysis of multiple correlatives (in which there are more than one relative expressions) is referred to future research. The interested reader can also consult Lipták (2000) for facts and some properties. Cross-linguistic comparison will be restricted to Hindi, with the exception of Serbian. The larger group of Slavic languages as well as Northern Basque correlatives will be neglected for reasons of space. For the properties of the latter, see Rebuschi (2001, 2003, 2004, in prep.)

The Hungarian data on correlatives were collected in the form of written questionnaires from 13 informants.¹ Variation between these speakers can be taken to be negligible, unless otherwise indicated.

The discussion will take the following shape. The paper starts with empirical groundwork for Hindi/Hungarian comparison in section 2. Using a list of properties that define Hindi correlatives, it will be shown that Hungarian left-peripheral free relatives also qualify as correlatives. To name the most important properties, Hungarian correlatives are also headless clauses, located to the left of their nominal. They display the exact same restrictions on the kind of nominals they can appear with as Hindi correlatives. It will be pointed out that correlatives in Hungarian do not originate from underlying headed relative structures, thereby constituting a fundamentally different relativization strategy altogether from these. In section 3-5, which contains the core material of the paper, Hungarian correlatives will be analyzed. Section 3 contains a detailed investigation into the fine structure of Hungarian correlatives, with emphasis on the relation between the correlative and its associated pronominal, in simple and complex sentences. It will be shown that the correlative and the pronominal do not form a constituent at any point in the derivation, unlike in Hindi. However, both occur in the left periphery of the clause: the correlative as a result of base-generation and the demonstrative as a result of topic/focus raising. When correlative and demonstrative are not in the same clause, locality effects characteristic of topicalization can be discerned, which indicate that correlatives optionally move as *topics* across sentence-boundaries. On the basis of the observed patterns section 4 will argue that correlativization in Hungarian makes use of a strategy that is available for topical discourse constituents, in a structure that is closest to *simplifying* left dislocation and which shares some of its syntax with ordinary DP-left dislocation in Hungarian. Section 5 will recapitulate the findings, draw conclusions and highlight the differences between Hindi and Hungarian correlativization.

2. The properties of correlatives in Hindi and Hungarian

Correlativization is a relativization strategy characteristic of Indo-Aryan languages, studied both in the typological literature (Downing 1973, Keenan 1985) and in the generative one (Srivastav 1991, Dayal 1996, Bhatt 2003, Izvorski 1996, Rebuschi 2001, den Dikken to appear). It is essentially a non-local strategy of relativization in which a restrictive relative clause is found to the left of the nominal item it

¹ These were: Ágnes Csanádi, Huba Bartos, Péter Boross, Réka Bozzay, János Duna, Judit Gervain, Beáta Gyuris, Veronika Hegedűs, Eszter Herczenik, György Lipták, Katalin Liszi, Lászlóné Sipos and Kriszta Szendrői. The Serbian data in section 3 are based on judgements by Boban Arsenijevic, Marijana Marelj and Radoslava Trnavac.

modifies, adjacent or at a distance. Consider the following Hindi example for illustration, where the correlative and the nominal are found adjacent:

- (1) [_{CorCP} jo laRkii khaRii hai] vo lambii hai [Hnd]
 REL girl standing is that tall is
 'The girl who stands there is tall.'

The correlative clause itself appears as a headless (free) relative and contains a relative phrase (*jo laRkii* 'REL girl'). The main clause contains the nominal modified by this relative (*vo* 'that'). The schematic structure of (1) can be summarized as (2):²

- (2) [_{CorCP(subordinate clause) ... Rel-XP_i ...]_i [_{IP(main clause) ... Dem-XP_i ...]}}

Patterns like (2) are available in Hungarian as well. Observe (3), where a (free) relative occurs to the left of its associated nominal, in the left periphery of the main clause:

- (3) [_{CorCP} Aki korán jött], azt ingyen beengedték. [Hun]
 REL-who early came that-ACC freely PV-admitted-3PL
 'Those who come early were admitted for free.'

The correlative clause on the left precedes the demonstrative *az* 'that', just like in Hindi. (*Az* obligatorily has to appear in preverbal position, the relevance of which we will return to in sections 3-5 below.)

Both Hindi and Hungarian, like many other languages, also have embedded relatives, in which the nominal is construed as the head of relativization (in the pre-kaynean sense of the word) and precedes the relative clause. The demonstrative *vo* and *az* can serve as heads in both languages (Dayal 1996, Kenesei 1994). These headed structures are shown for Hindi and Hungarian in (4) and (5) respectively:

- (4) vo laRkii [_{RC} jo khaRii hai] shaayad lambii hai [Hnd]
 that girl REL standing is maybe tall is
 The girl who is standing may be tall.
- (5) Azt [aki korán jött] ingyen beengedték. [Hun]
 that-ACC REL-who early came freely PV-let-3PG
 'Those who come early were admitted for free.'

The difference between the correlative strategy (1/3) and the headed strategy (4/5) is not only that of word order. The two constructions are not transformationally related and cannot be derived from the same underlying base. Arguments to this effect can be constructed on the basis of the different properties of the two. These will be reviewed in the next two sections. The first section will deal with restrictions on the associated nominal, and the second one will turn to questions about *headedness* in analytical detail. All facts will argue against deriving correlatives from underlying headed structures. For reasons of space and comparison the Hindi and Hungarian facts will be discussed in tandem.

2.1. Restrictions on the associated nominal: the demonstrative requirement

As Srivastav (1991) and Dayal (1996) pointed out, there are a couple of properties that characterize only correlatives but not headed relatives in Hindi, necessitating a separate treatment of the two. This

² The notation and abbreviations are borrowed from Bhatt (2003), and are as follows: CorCP = correlative clause; Rel-XP = phrase headed by a relative pronoun; Dem-XP = phrase with a demonstrative (the correlative pronominal). Additional glosses are: ACC = accusative case; ERG = ergative case; POSS = possessive; POT = potential (*may*); PV = preverb(al element); REL = relative morpheme; RC = relative clause in a headed position; 1/2/3/sg/pl = person, number features. Nominative/absolutive case is not glossed throughout.

section mentions one of the most obvious differences: the restriction on the type of the associated nominal.

This restriction, as already mentioned above, concerns the nominal that the correlative modifies. While headed relatives can contain any nominal in the head position, the nominal associated with correlatives can only be a definite item and has to contain a demonstrative (or a strong quantifier):

- (6) *do laRkiyaaN* [RC jo khaRii haiN] lambii haiN headed relative [Hnd]
 two girls REL two tall are standing are
 ‘Two girls who are standing are tall.’
- (7) *[CorCP jo laRkiyaaN khaRii haiN] *do* lambii haiN correlative [Hnd]
 REL girls standing are two tall are
 ‘idem’

The situation is exactly the same in Hungarian:

- (8) *Egy fiú* [RC akivel Mari moziba jár], telefonált. [Hun]
 a boy REL-who-WITH Mari cinema-TO goes called
 ‘A boy who Mary goes to the cinema with, called.’
- (9) *[CorCP Akivel Mari moziba jár], *egy fiú* telefonált. [Hun]
 REL-who-WITH Mari cinema-TO goes a boy called
 ‘idem’

As can be seen from the examples in (6)-(9), correlatives can only be associated with a definite item. This definite associate moreover has to be a demonstrative item or a phrase formed with a demonstrative:

- (10) [CorCP Akivel Mari moziba jár], *(*az*) a fiú telefonált. [Hun]
 REL-who-WITH Mari cinema-TO goes that the boy called
 ‘The boy who Mari goes to the cinema with called.’

The observed split argues against deriving both structures from the same source. If correlatives were to derive from an underlying headed structure through leftward extraposition, we would not expect to find differences in the kind of nominal that follows the correlative, as there are no such restrictions with headed relatives. Correlatives, however, introduce restrictions on their own, which necessitates the view that they are different from headed relatives.³

The definiteness restriction arguably finds its source in the *interpretive* properties of correlatives, which, just like free relatives in general, refer to a unique/maximal individual that has the property denoted by the relative clause (Jacobson 1995). Due to this property, their associated nominal can also only be a definite element (Dayal 1996).

³ For further distinguishing properties, see Dayal (1996, Chapter V/1.3). One important difference concerns the unavailability of stacking, both in Hindi and Hungarian correlativization:

- (i) *[CorCP jo laRkii khaRii hai] [jo lambii hai] *vo* Colaba-me rahtii hai
 REL girl standing is REL tall is dem Colaba-in lives is
 lit. ‘Which girl is standing, who is tall, she lives in Colaba.’
- (ii) *[CorCP Ami olcsó], [ami jó] *az* nem kapható.
 REL-what cheap REL-what good that not available
 lit. ‘What is cheap, what is good, is not available.’

Headed relatives do not have this restriction. Another difference is observable in the availability of Rel-NP - Dem-NP combinations in Hindi correlatives, which are not available with headed relatives:

- (iii)a. **vo laRkii* [RC jo laRkii khRii hai] lambii hai
 that girl REL girl standing is tall is
- b. [CorCP jo laRkii khaRii hai] *vo laRkii* lambii hai
 REL girl standing is that girl tall is

This difference is less noticeable in Hungarian, where Rel-NP-Dem-NP combinations are weird in both patterns.

2.2. The headless nature of correlatives

Next to nominal restrictions, there are further pieces of evidence arguing against deriving correlatives from headed relatives. This section illustrates these. The first two present a construction type and a lexical item that are only licensed in correlatives but not in headed relatives: multiple relatives (exemplified from both Hindi and Hungarian) and a Hungarian specific relative pronominal *amely* 'REL-which'. The third, also Hungarian specific, argument, comes from verbal object agreement patterns with correlatives and postverbal free relatives. All these phenomena argue for the *headless* status of correlatives, and against deriving them from headed constructions.

2.2.1. Indicators of headlessness I: multiple relatives

Multiple relatives are relatives in which we find two (or sometimes even more) relative expressions, referring to more than one entity. Multiple relative pronouns can occur in correlatives:

- (11) [_{CorCP} jis laRkiine jis laRkeko dekhaa] usne usko passand kiyaa [Hnd]
REL girl-ERG REL boy-ACC saw that-ERG that-ACC likes
'Which girls saw which boy, she liked him.'
- (12) [_{CorCP} Aki amit k r], az azt elveheti. [Hun]
REL-who REL-what-ACC wants that that-ACC take-POT-3SG
'Everyone can take what he/she wants.'

The main clause pronominals *az* 'that' and *azt* 'that-ACC' refer back to the individuals picked out by the relative clause, just like in single relatives above. Now, while multiple relatives are perfectly fine in correlatives, they are crashingly ungrammatical in headed patterns:

- (13) *Usne usko [_{RC} jis laRkiine jis laRkeko dekhaa] passand kiyaa [Hnd]
that -ERG that -ACC REL girl-ERG REL boy-ACC saw likes
'Which girls saw which boy, she liked him.'
- (14) *Az azt [_{RC} aki amit k r] elveheti. [Hun]
that that-ACC REL-who REL-what-ACC wants take-POT-3SG
'Everyone can take what he/she wants.'

Such sentences cannot be transformationally derived from an underlying headed structure, due to the fact that the relative clause, obviously one constituent, would have to be extracted from under two heads at the same time (the demonstratives). These sentences provide prima facie evidence for the claim that the correlative is a base-generated free relative that has *no* syntactic head.

2.2.2. Indicators of headlessness II: Hungarian *amely* 'REL-which'

A further argument to the same effect comes from Hungarian (originally noticed by Kenesei 1992). It concerns the distribution of the relative pronoun *amely* 'REL-which', which can *only* occur in relatives with a full nominal head, but not in headless (free) relatives, as the following example in (15) illustrates:

- (15) Olvasom *(azt a k nyvet) [_{RC} 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.'

Without the overt head included in brackets, the sentence is ungrammatical, showing that *amely* ‘REL-which’ cannot be used in free relative clauses.⁴ Interestingly, however, if the relative clause is to the left of the nominal item, we get an ungrammatical result:

- (16) *_{[CorCP} Amelyet most vettem] azt a könyvet olvasom.
REL-which-ACC now bought-1SG that-ACC the book-ACC read-1SG

The ungrammaticality of *amely* in the correlative (16) indicates that the correlative is also a *headless* relative clause, and thus is unable to accommodate the head-sensitive *amely*. That is, the main clause nominal *azt a könyvet* ‘that book-ACC’ in (16) does not serve as a head for the relative clause in this example. The link between the relative on the left and this DP is not a head-dependent relation.

2.2.3. Object agreement patterns with focused verbs and free relatives

The last argument to the effect that correlatives are not derived from headed structures comes from a rather complex set of data showing differences in object agreement that free relatives exhibit with verbs that are themselves focused. Although the phenomenon on the whole is ill-understood, it argues for the headless status of correlatives. Before turning to the data, let me provide some background information on verbal inflection and the syntax of free relatives.

Hungarian verbs inflect for the definiteness of their object: they are either marked definite or indefinite, roughly along the lines of the indefinite/definite semantic distinction:

- (17) a. János szeret-i Évát. definite object
János love-3SG.DEF Éva-ACC
'János loves Éva.'
b. János szeret-Ø egy lányt. indefinite object
János love-3SG.INDEF a girl-ACC
'János loves a girl.'

In case the object is a free relative with specific reference in the postverbal position, the verb shows definite conjugation.

- (18) János szeret-**Ø*-i _{[RC} amit most eszik].
János like-3sg.INDEF/DEF REL-what-ACC now eats
'János likes what he is eating now.'

In Kenesei (1992) the definiteness agreement is argued to be the result of a little *pro* heading the free relative in this case:⁵

- (19) János szeret-i _{[DP} *pro* _{[RC} amit most eszik].
János like-3SG.DEF REL-what-ACC now eats

⁴ Linear dissociation from the head, however, does not result in ungrammaticality, as (i) shows:

- (i) *Azt a könyvet* olvasom _{[RC} amelyet most vettem].
that-ACC the book-ACC read-1SG REL-which-ACC now bought-1SG
'I am reading the book that I have just bought.'

⁵ The analysis in (19) is supported by the fact that non-specific (quantificational) free relatives on the other hand show *indefinite* agreement (ia), which, according to Kenesei (1992) is due to the fact that these free relatives are headed by the *wh*-pronoun (ib) — note that *wh*-expressions in Hungarian trigger indefinite agreement (with the exception of (*amelyik* ‘(REL-)which’)):

- (i) a. János vehet-Ø, _{[RC} amit akar].
János buy-POT-3SG.INDEF REL-what-ACC wants
'János can buy what(ever) he wants.'
b. János vehet-Ø _{[NP} amit _{[RC} akar]].

The interesting data arise when a free relative object occurs to the *left* of the verb in cases when the verb itself is focussed. The verb *szeret* 'like/love' is such a verb: it is inherently focused, which is indicated with capitals below. With focussed verbs, a free relative in sentence initial position becomes degraded with definite agreement, and the indefinite agreement, which was ungrammatical in (18), continues to be ungrammatical here, too:

- (20) [_{RC} Amit most eszik] János SZERET-**Ø* /??-i.
 REL-what-ACC now eats János like-3SG.INDEF/DEF
 'János likes what he is eating now.'

The only way to assure full grammaticality in this case is to spell out a nominal, in its simplest form as a demonstrative *az* 'that' either before or after the relative:

- (21) a. [_{CorCP} Amit most eszik] *azt* János SZERET-**Ø*/-i.
 REL-what-ACC now eats that-ACC János like-3SG.INDEF/DEF
 b. [_{DP} Azt [_{RC} amit most eszik]] János SZERET-**Ø*/-i.
 that-ACC REL-what-ACC now eats János like-3SG.INDEF/DEF
 'János likes what he is eating now.'

In both (21a) and (21b) the verb is grammatical with definite agreement, due to the fact that it agrees with the object *azt* 'that' in both cases. In (21a) *azt* is the correlative nominal, in (21b) it is the head of the whole relative clause. While the need for such an overt pronominal is not clear, these agreement facts clearly argue for the headless, and underived nature of correlatives. If correlatives were derived from an underlying headed relative structure in which the relative clause originates from a postverbal argument position, then in fact (20) above derives from (19), in the following way:

- (22) a. János szeret-i [_{DP} pro [_{RC} amit most eszik].
 János like-3SG.DEF REL-what-ACC now eats
 'John likes what he is eating now.'
 b. [_{RC} Amit most eszik]_i János szeret-i [_{NP} pro [*t_i*]]
 REL-what-ACC now eats János like-3SG.DEF

We know, however, that while (19/22a) is grammatical, (20/22b) is not. This shows that the two structures are not linked via a derivational process, that is, the correlative pattern in (20) cannot be derived from an underlying headed pattern.⁶

2.3. Interim summary

This section argued, using evidence from various domains of Hindi and Hungarian syntax, that free relatives found in sentence-initial positions in these languages constitute a special relativization strategy, correlativization. The parallels between Hindi and Hungarian in this domain clearly show that correlatives exist in both languages and have many properties in common.

Evidence from the distribution of main clause nominals, multiple relatives, relative pronouns and agreement facts were provided to argue that correlatives are not related to headed relatives, and are not derived from those. On the basis of these facts, the schematic structure of correlatives can be drawn as

⁶ Note that the ungrammaticality of (22b) is not due to some yet unknown licensing requirement of postverbal stranded *pro* in verb-focus contexts. This is clear from the behaviour of subject relatives in the exact same context. These are grammatical, without an over *az* 'that' pronominal:

- (i) [_{CorCP} Aki most jött] szereti Jánost.
 REL-who now arrived like-3SG.DEF János-ACC
 '(S)he who arrived now loves János.'

The difference between subjects and objects cannot be due to the presence or absence of *agreement* either, as subjects also show agreement with the verb (in person and number).

shown in (23a). The facts also unanymously indicated that this structure is not related to the headed pattern in (23b):⁷

- (23) a. [_{CorCP} ... Rel-XP ...] [_{IP} ... Dem-XP ...] correlative pattern
 b. [_{IP} ... [Dem-XP [_{CorCP} ... Rel-XP ...]] headed pattern

The next two sections will further examine the properties of the correlative pattern (23a) and establish its fine-grained syntax.

3. The syntactic structure of Hungarian correlatives

To establish the structure of Hungarian single correlatives, one needs to study word order variation and locality effects in simplex and complex sentences. Before reviewing the relevant facts and devising arguments in section 3.2-3.5, the first section provides an outlook on the structural properties of Hindi correlatives, for ease of orientation.

3.1. Structural accounts of correlatives in the literature

As we have seen above, correlative structures involve a left-peripheral free relative clause (CorCP), followed by a demonstrative nominal associate (Dem-XP). The previous section showed that there are many syntactic indications that correlatives have to be treated *differently* from headed relatives. This brings up the following question: if CorCP is not dependent on Dem-XP in the well-known way of head-relative structures, what is the precise link between the two?

To answer this question, one can imagine many a priori possible scenarios, three of which were proposed in the literature. I start with the two scenarios that were originally proposed for Hindi.

The first was proposed by Srivastav (1991) and Dayal (1996) for both single and multiple Hindi correlatives as well as by Bhatt (2003) for multiple correlatives. This can be called the *high-adjunction+binding* account and summarized as:

- (Ai) *high adjunction+ binding account*
 the correlative clause is base-generated adjoined to the matrix clause (IP); it behaves as a generalized quantifier and binds the Dem-XP, a variable (see 24)

- (24) [_{IP} [_{CorCP} ... Rel-XP ...]_i [_{IP} ... Dem-XP_i ...]]

A partly similar account was proposed by Rebuschi (2003, in prep) for Northern Basque, with the difference that the correlatives do not behave as generalized quantifiers.

The second account was proposed by Bhatt (2003) for single Hindi correlatives and can be called the *low adjunction+ CorCP movement* account:

- (Aii) *low adjunction+ CorCP movement account*
 the correlative is base-generated adjoined to Dem-XP and is optionally moved out of there (via A-bar scrambling/QR) together with the optional scrambling of Dem-XPs (see 25)

- (25) [_{IP} [_{CorCP} ... Rel-XP ...]_i [_{IP} ... (Dem-XP)_j [t_i] Dem-XP_j ...]]

The most basic difference between these two accounts is how they derive the observed CorCP-YP-Dem-XP word order. The low adjunction account does this via *movement* of the CorCP, while the high-adjunction account via *base-generation* of CorCP in the left. As a result, the two accounts make crucially different predictions about locality effects found between CorCP and Dem-XP. Under the

⁷ See also Dayal (1996) for semantic arguments which support this structural difference between correlative and headed relativization.

view that variable binding is not hindered by locality⁸, the high adjunct account predicts no locality effects to be found in Hindi.

However, as both Dayal (1996) and Bhatt (2003) show, Hindi clearly displays island effects between CorCP and Dem-XP. Consider for example the CNP island configuration in (26a), with actual data in (26b):

- (26) a. [_{CorCP}]_i [_{IP} ... [_{NP} **NP** [_{RC} ... Dem-XP_i ...]] ...] [Hnd]
 b. *[jo vahā: rah-ta: hai:] mujh-ko **vo kaha:ni** jo Arundhati-ne *us-ke-baare-me* likh-ii pasand hai
 REL there stay be I-DAT that story REL Arundhati-ERG that-ABOUT write be
 ‘Who lives there, I like the story that Arundhati wrote about that boy.’

Since pronominal variable binding does not display locality effects, it is not straightforward to see how the high-adjunct analysis could handle these. On the other hand, the low-adjunction analysis predicts these cases to be ungrammatical.

Other arguments in favour of the low-adjunction analysis come from reconstruction effects, both in the domain of condition C effects as well as pronominal binding facts. Here I exemplify these with a binding principle C effect (Bhatt 2003):

- (27) a. [_{CorCP} **R-exp.** ...]_i [**pron** Dem-XP_i ...] [Hnd]
 b. *[_{CorCP}jo laṛkii **Sita-ko**_j pyaar kar-tii hai]_k **us-ne**_j *us-ko*_k ṭhujraa di-yaa
 REL girl Sita-ACC love do be that-ERG that-ACC reject give
 ‘He_i rejected the girl who loves Sita_j.’

The name (*Sita-ko*) contained in the correlative cannot be coreferential with the pronoun (*us-ne*) in the matrix clause, which argues for a reconstruction step that takes the correlative back to a position c-commanded by this matrix pronominal. If correlatives originate from a Dem-XP-adjoined and undergo reconstruction at LF, as shown in (28), this falls out immediately:

- (28) [_{CorCP} R-exp. ...]_i [**pron** [[_{CorCP} ~~R-exp.~~ ...]_i] Dem-XP_i ...]

Another piece of evidence for generating CorCP and Dem-XP together comes from word order facts indicating that these two appear together in the overt syntax as well in some cases. The following contains two CorCP-Dem-XP sequences (Bhatt 2003):

- (29) Ram-ne [_{CorCP} jo laṛkaa tumhaare pi:chhe hai] [_{Dem-XP} *us laṛke-ko*] [Hnd]
 Ram-ERG REL boy your behind is that boy-DAT
 [_{CorCP} jo kita:b Shantiniketan-ne chhaapii thii] [_{Dem-XP} *vo kitaab*] dii
 REL book Shantiniketan-ERG print-PFV was that book give-PFV
 ‘Ram gave the book that Shantiniketan had published to the boy behind you.’

Yet another indication that these form a constituent together comes from short replies. In these correlatives would not occur without their associated Dem-XP (Rajesh Bhatt p.c.):⁹

⁸ A claim that Dayal (1996) does not subscribe to: for her, Dem-XPs are variables with the same licensing conditions as A-bar traces.

⁹ Multiple relatives cannot show up with their Dem-XPs in short replies (Dayal 1996):

- (i) a. Who likes whom?
 b. *jis-ne jis-ko dekhaa us-ne us-ko
 who-ERG who see he-ERG he
 ‘lit. Who saw whom, he him.’

This shows that multiple relatives are not at any point adjoined to either Dem-XP, a claim held both by Dayal (1996) and Bhatt (2003).

- (30) a. Who came first? (question)
 b. [jo laRkii khaRii hai] ??*(vo) (answer) [Hnd]
 REL girl standing is that
 ‘The girl who is standing.’

If CorCP and Dem-XP did not form a constituent, but would instead be related at a distance, it would be difficult to explain, how such contexts would force the occurrence of the demonstrative, assuming that short replies involve IP-deletion (Van Craenenbroeck 2004). If on the other hand CorCP and Dem-XP form a constituent and thus can move together to an IP-external position, like FocP, these fact are expected.

On the basis of the above facts, the low adjunction analysis is clearly favoured to account for the Hindi data: CorCP and Dem-XP form one constituent in the base, where a CorCP-Dem-XP complex is formed by adjunction. Due to the nature of adjunction, neither CorCP nor Dem-XP acts like a head. This local relation can be broken up by later movement of the CorCP to the left, giving rise to locality effects.

Note that there is yet another possible way to account for these locality effects. This was proposed by Izvorski (1996) for Hindi and South Slavic and represents the third structural account of correlatives, summarized in (Aiii):

- (Aiii) *high adjunction+Dem-XP-raising account*
 the correlative is base-generated adjoined to the matrix clause (CP); Dem-XP moves from argumental position to Spec,CP via A-bar movement, which is covert in Hindi (a *wh*-in-situ language), and overt in Slavic (a *wh*-ex-situ one) (see 31)

- (31) [CP [CorCP ... Rel-XP ...]_i [Dem-XP_i] [CP ... [~~Dem-XP_i~~...]]

This *high adjunction+Dem-raising* account can be viewed as a combination of the two approaches mentioned above. It keeps the high, CP/IP-adjoined position for the correlative and takes care of locality effects via raising the Dem-XP in an A-bar manner. According to Izvorski, the movement step depicted in (31) is parametrized along the lines of the properties of *wh*-in-situ in languages: it takes place *overtly* in overt movement languages like Bulgarian and Serbian, and *covertly* in *wh*-in-situ Hindi.¹⁰

The next three sections turn to Hungarian correlatives and their properties concerning word order, reconstruction and locality effects. It will be shown that the Hungarian facts actually require an account *different* from any of the three accounts above. The proper structure of Hungarian is a combination of some parts of two accounts: the optional CorCP-movement part of (Aii) and the obligatory Dem-XP movement part of (Aiii).

3.2. Word order and reconstruction in simplex sentences

To start with the most basic properties of correlatives in simplex sentences, let us take stock of the basic word order facts we find in sentences where correlative and Dem-XP are in the same clause.

Correlatives in Hungarian are clause-initial constituents. They can be preceded by topics only with a serious loss of grammaticality.

- (32) ??A szervezők [CorCP aki korán jön] azt ingyen beengedik.
 the organizers REL-who early comes that-ACC freely PV-admit-3PL
 ‘Those who come early, the organizers will let in for free.’

The fact that correlatives cannot be preceded by topics does not mean that they have to initial elements in sentences: they can also be embedded within finite *that*-clauses without any problem:

¹⁰ Arguments against the viability of this account for Hindi were provided in Bhatt (2003). In section 3.3.2 it will be shown that it does not hold for all dialects of Serbian, either.

- (33) Péter hallotta, hogy [_{CorCP} aki korán jön], azt a szervezők ingyen beengedik.
 Péter heard that REL-who early comes that-ACC the organizers freely PV-admit-3PL
 'Péter heard that those who come early, the organizers admit for free.'

The position of Dem-XP has to comply with a strong restriction and a preference. Dem-XPs have to occur preverbally under all circumstances:¹¹

- (34) * [_{CorCP} Aki korán jön], ingyen beengedik a szervezők azt.
 REL-who early comes freely PV-admit-3PL the organizers that-ACC
 'Those who come early they admit for free.'

Further, they can be separated from the correlative by topics, but speakers have a slight preference to keep them next to the correlative:

- (35) [_{CorCP} Aki korán jön], (azt) a szervezők (?azt) INGYEN engedik be.
 REL-who early comes that-ACC the organizers that-ACC freely admit-3PL PV
 'Those who come early the organizers admit FOR FREE (and not for money).'

In this example, the DP *a szervezők* 'the organizers' as well as *az* in both positions are *topics*, which is indicated in (35) by the fact that they occur higher than the optional preverbal contrastive focus *ingyen* 'for free'. The focused nature of the latter is indicated by the fact that it is necessarily adjacent to a verbal head (see É.Kiss 1987, Brody 1995 on the V⁰-PV word order indicative of focussing). Note the sequence of elements in the left periphery of Hungarian and the fact that the topic position is iterable:

- (36) [_{TopP*} [_{FocP} [_{Foc} V⁰ [PV...]]]]

With this structure in the background, the structure of correlatives can be given in (37):

- (37) [_{CorCP} ...Rel-XP..]_i [_{TopP} (Dem-XP_i)] [_{TopP} (YP)] [_{TopP} (Dem-XP_i)] [_{FocP} ZP [_{Foc} V [PV...]]]]

The slight preference to keep CorCP and Dem-XP close together is a preference that is there in every context where the correlative and Dem-XP are separated by any material, also in cases when they are separated by clausal boundaries, to be reviewed in the next sections.

Interestingly, Dem-XP can also occupy the focus position of the clause, in which case it has focus interpretation, illustrated in (38). Again, the slightly marked status of the sentence is due to the non-adjacency of CorCP and Dem-XP.¹²

¹¹ (34) is outright ungrammatical in present-day Hungarian, but it does recall a distinctly archaic/poetic feel in several speakers. I did not manage to ascertain whether this order was possible at some earlier stage of the language, or whether it was always only part of the poetic freedom writers used in striving for rhyme. Observe the postverbal occurrence of Dem-XP in the following quote from the 20th century poem by Dezső Kosztolányi, *Könyörgés az ittmradókhöz* (*Prayer to those left behind*):

(i) [_{CorCP} Aki halandó], folyvást botlik az
 REL-who mortal continuously falls that
 számomra csak a kétes az igaz
 me-FOR only the doubtful is true
 'Those who are mortal always stumble
 only the doubtful is true to me.'

¹² The placement of Dem-XP in the focus position is actually obligatory if the correlative also contains focus:

(i) ? [_{CorCP} Aki KORÁN jön], (*a szervezők) AZT engedik be ingyen.
 REL-who early comes the organizers that-ACC admit-3PL PV freely

'It is those who come EARLY (as opposed to those who come LATE) whom the organizers admit for free.'

This kind of focus-matching effect is not confined to Hungarian. It affects any correlative-type construction, even conditional clauses in English (on whose correlative status see Bhatt and Pancheva to appear):

(ii) Even if you dress up as a clown, EVEN THEN/*then I am not going to this party of yours.

- (38) ?_[CorCP] Aki korán jön], (a szervezők) AZT engedik be ingyen.
 REL-who early comes the organizers that-ACC admit-3PL PV freely
 'It is those who come early whom the organizers admit for free.'

(38) corresponds to the following structural representation:

- (39) [_{CorCP} ...Rel-XP..]_i [_{TopP} (YP) [_{FocP} DEM-XP_i [_{FocV} [PV...]]]]

In short, the structural requirements of correlativization, illustrated in (37) and (39) are:

- (a) both CorCP and Dem-XP occur in the left periphery of the clause
- (b) CorCP is the most initial left-peripheral element
- (c) Dem-XP occupies a topic position or that of contrastive focus

The fact that CorCP and Dem-XP can be separated by other (topic) material in (37) and (39) indicates that CorCP and Dem-XP need *not* form a constituent in overt syntax. This is of course not to say that the most natural order (illustrated in 35 with Dem-XP adjacent to CorCP) is not a priori compatible with a structure in which CorCP and Dem-XP form a constituent together, as shown in (40):

- (40) [[_{CorCP} Rel-XP..] [_{DEM-XP_i}] [_{TopP} [...]]]

However, I take the strong view that this is *not* the structure we have in these cases, for the following reasons. First, unlike in Hindi, there is no other position in which these items occur adjacent. We cannot find them in any VP-internal position, as neither CorCP, nor Dem-XP can ever occur in such a position:

Note also that such a matching requirement is unidirectional, as is shown by the main text example in (38): focus on Dem-XP does not force focus within the CorCP. I put this unidirectionality down to the semantics focus projection out of relatives and a linearity effect (CorCP precedes Dem-XP).

Note also that in cases of focus matching, material intervening between CorCP and Dem-XP in Hungarian results in degrading grammaticality, more strongly than the usual degradation we get when CorCP and Dem-XP are not adjacent:

- (ii) ?_[CorCP] Aki BIKIKLIN jön], (??*a szervezők) AZT engedik be ingyen.
 REL-who bike-ON comes the organizers that-ACC PV-admit-3PG PV freely
 'It is those who come early (as opposed to late) whom the organizers admit for free.'

It needs to be mentioned (especially in the light of the discussion about example (40) in the main text) that this adjacency requirement is *not* due to the fact that CorCP and Dem-XP form a constituent in this case, however natural such an account would be. If it was the case, CorCP+Dem-XP as a complex would occupy the focus position in (ii), an option that can be ruled out independently. As Kenesei (1992) shows, the only clausal constituent that can ever occur in the focus position are free relatives. Crucially for our argumentation, finite *that*-clauses for example, can never occur in the focus position:

- (iii) *_[CP] Hogy BIKIKLIN jön] mondta meg Péter.
 that bike-ON comes said PV Péter
 'What Péter did say was that he is coming ON BIKE.'

Finite clauses, however, display the exact same behaviour as correlatives when their associated pronominal is present in the sentence. This pronominal has to be focused and needs to be adjacent to the clause:

- (iv) *_[CP] Hogy BIKIKLIN jön] (??*Péter) AZT mondta meg.
 that bike-ON comes Péter that-ACC said PV
 'What Péter said was that he is coming ON BIKE.'

Given that in (iv) it cannot be the case that the finite clause is in the focus position, if we believe the testimony of (iii), the option that the clause forms a constituent with the pronoun is ruled out. I conclude that the parallel constraint with the correlative in (ii) cannot get an explanation in terms of CorCP and Dem-XP forming one constituent, either.

- (41) *A szervezők ingyen beengedik [_{CorCP} aki korán jön] azt.
 the organizers freely PV-admit-3PL REL-who early comes that-ACC
 'Those who come early whom the organizers admit for free.'

Second, if indeed this left periphery position is the *only* position where they can occur as a constituent, we are led to the rather unappealing assumption that cases where they are not found together (35 with low *az* and 38) either originate from another structure, or are the result of lowering Dem-XP. Third, CorCP and Dem-XP never occur in isolation, unlike in Hindi (compare 30 above). Even in short replies, we do not find CorCP-Dem-XP combinations in Hungarian:

- (42) a. Who came first?
 b. [_{CorCP} Aki ott áll], (**az*). [Hun]
 REL-who there stands that
 'The one who is standing there.'

These considerations (as well as footnote 12 above) argue that the correct structure of CorCP-Dem-XP sequences is the one in which these do *not* form a constituent. The right structures are the ones that were given above in (37) and (39), repeated here for convenience:

- (37) [_{CorCP} ...Rel-XP..]_i [_{TopP} (*Dem-XP_i*)] [_{TopP} (YP)] [_{TopP} (*Dem-XP_i*)] [_{FocP} ZP] [_{Foc} V [PV...]]]]
 (39) [_{CorCP} ...Rel-XP..]_i [_{TopP} (YP)] [_{FocP} *DEM-XP_i*] [_{Foc} V [PV...]]]

Further evidence for the non-constituent-nature of Rel-XP and Dem-XP in correlatives will be presented in the next section, which turns to locality effects between the two in complex sentences. Before turning to these, a note is in order about reconstruction, as this is the only property relating to locality that can be tested in simplex sentences are reconstruction effects.

Reconstruction facts unanimously show that correlatives *do not reconstruct* in Hungarian. Observe (43), where a name is contained in the correlative, freely coindexed with the subject of the main clause:

- (43) [_{CorCP} Akit szeret Mari_i], *azt* meghívta *pro_i* a buliba.
 REL-who-ACC loves Mari that-ACC invited the party-TO
 'Who(ever) Mari loves, she invited to the party.'

If the correlative clause did reconstruct back into the object position, we would expect that coindexation between the *pro* subject of the main clause and the R-expression *Mari* 'Mari' in the relative would be impossible. Note that embedded relatives cannot be construed with coreference between the pronominal subject of the main clause and the R-expression, due to the fact that the former c-commands the latter:

- (44) *Meghívta *pro_i* **azt** [_{RC} akit szeret Mari_i] a buliba.
 invited that-ACC REL-who-ACC loves Mari the party-TO
 'Who(ever) Mari loves, she invited to the party.'

Note also that the behaviour of (43) is not due to some kind of linearity effect. An R-expression inside an object DP cannot be coindexed with the subject pronoun in Hungarian, even when the former is left-peripheral and thus precedes the latter:

- (45) *_{[DP} Az Annáról_i írt könyvet] nem olvasta *pro_i* még.
 the Anna-ABOUT written book-ACC not read-3SG yet
 'She_i did not read the book about Anna_j yet.'

If reconstruction effects are diagnostics of movement (Fox 2000), these facts argue *against* a movement scenario for correlatives, against low adjunction (Aii above) and *in favour* of the base-generation hypothesis (Ai or Aiii). In section 3.5, however, it will be shown that these reconstruction

facts give *inconclusive* evidence about where the correlative originates from. Reconstruction arguably follows from independent properties of Hungarian, and can not be taken to be an indicator of locality relations.

3.3. Locality effects with correlatives

The word order patterns of correlativization in complex sentences will be demonstrated in two steps. In the first step, I illustrate cases in which both CorCP and Dem-XP are found within the same clause, but at a distance from their original clause. In the second step, we will consider cases where CorCP and Dem-XP, neither in their original clause will be located in different clauses, CorCP being higher than Dem-XP. Theoretical conclusions based on the data will be presented along the way.

3.3.1. Locality effects with long distance correlativization I: CorCP and Dem-XP in the same clause

Let us start with cases in which CorCP and Dem-XP are at a distance from their source clause but can be found in the same clause. (33) above demonstrated that correlatives can be embedded. Next to being embedded under a matrix predicate they can also occur in the left periphery of this embedding matrix clause. If the embedding clause contains no island, we get two grammatical options, differing in word order properties:¹³

- (46) [_{CorCP} Akik korán jönnek], *azokat* Péter hallotta, hogy ingyen beengedik.
REL-who-PL early come that-PL-ACC Péter heard that freely PV-admit-3PL
'Péter heard that those who come early are admitted for free.'
- (47) [_{CorCP} Akik korán jönnek], *AZOKAT* hallotta Péter hogy ingyen beengedik.
REL-who-PL early come that-PL-ACC heard Péter that freely PV-admit-3PL
'It was those who come early, whom Péter heard are admitted for free.'

As the word order indicates, (46) contains *azt* 'that-ACC' in topic position before the higher verb *hallotta* 'heard', and (47) contains Dem-XP in the focus position. The interpretation reflects this difference in syntactic positioning.

To test whether (46) and (47) involve a movement dependency of any sort, we have to check island effects. If the embedding clause contains a complex noun phrase island, the sentence is ungrammatical both with the topic and the focus order:

- (48) * [_{CorCP} Aki korán jön], *azt* Péter hallotta **a hírt**, hogy ingyen beengedik.
REL-who early comes that-ACC Péter heard the news-ACC that freely PV-admit-3PL
'Péter heard the news that those who come early are admitted for free.'
- (49) * [_{CorCP} Aki korán jön], *AZT* hallotta Péter **a hírt**, hogy ingyen beengedik.
REL-who early comes that-ACC heard Péter the news-ACC that freely PV-admit-3PL
'Péter heard the news that it is those who come early, who are admitted for free.'

These island effects clearly shows that we are dealing with movement in both cases. The question is, what kind of movement is involved in these examples?

Let us start with (48) first, which contains Dem-XP in topic position. It is presumably due to the movement of Dem-XP to this position that the sentence is ungrammatical. As (50) shows, topicalization in Hungarian is sensitive to CNPC islands:

- (50) *A koncertre hallotta Péter **a hírt**, hogy ingyen beengednek mindenkét.
the concert-TO heard Péter the news-ACC that freely PV-admit-3PL everyone-ACC
'To the concert, Péter heard the news that they admit everyone for free.'

¹³ Rel-XP and Dem-XP were changed to plural in these examples in order to avoid the reading in which Dem-XP *az* 'that' before the embedding verb could be understood as the sentential expletive accompanying the finite embedded clause. Note also that from here onwards the most subject of the embedded clause is represented by a plural *pro*.

It is likely then that in (48), we deal with a case of topicalization as well, namely the topicalization of Dem-XP. Whether CorCP undergoes any movement is untestable since Dem-XP movement gives rise to an island violation in itself.

(49) involves focusing of Dem-XP, as is visible from the Dem-XP-verb adjacency. Focusing (or *wh*-movement) is also island-sensitive in Hungarian:

- (51) *Kiket hallotta Péter a hírt, hogy ingyen beengedik?
 who-PL-ACC heard Péter the news-ACC that freely PV-admit-3PL
 'Who did Péter heard the news that they admit him for free?'

While Dem-XP is definitely involved in A-bar movement, it is impossible to tell from these facts alone whether CorCP was involved in any movement step as well.

To summarize the results so far, we found that correlatives can take part in two possible structures when they are separated from their matrix clause. One in which Dem-XP undergoes long-distance topicalization and one in which it is long-focused.

- (52) a. [_{CorCP} ...Rel-XP...] [_{TopP(inCP2)} Dem-XP_k [_{CP1} ~~Dem-XP_k~~]]] topicalization of Dem-XP
 b. [_{CorCP} ...Rel-XP...] [_{FocP(inCP2)} Dem-XP_k [_{CP1} ~~Dem-XP_k~~]]] focusing of Dem-XP

Interestingly, there is a further extraction context that provides evidence for these structures in even more convincing details. Such a context contains islands that are transparent to topicalization but not to *wh*-focus-movement in Hungarian. Such islands contain a non-specific NP in an existential sentence. I will refer to these as *presentational CNP contexts*.¹⁴ Unlike focus and *wh*-movement which are impossible across these, topicalization is fine across them. (53) shows a topicalization case, and (54) that of *wh*-focus-extraction.¹⁵

- (53) A lányokat volt koncert, [_{RC} amire ingyen beengedték].
 the girls-ACC was concert REL-what-TO freely PV-admitted-DEF.3PL
 lit. 'The girls, there were concerts, where they were admitted for free.'

¹⁴ The availability of topicalization out of presentational CNPs is subject to subtle variation in Hungarian. In the pool of 13 speakers I consulted one speaker (whom I will refer to as speaker A) systematically does not allow for topicalization in these cases. Another speaker (speaker B) does not allow for topicalization out of nominal relatives, as in (53), but allows for topicalization across 'when'-clauses under existential predicates, as in (i):

- (i) A lányokat_i volt [_{RC} amikor ingyen beengedték t_i].
 the girls-ACC was REL-when freely PV-admitted- PAST-DEF.3PL
 lit. 'The girls, there were occasions, when they were admitted for free.'

Note also that purpose adjunct clauses are another context in which topicalization, as opposed to *wh*-movement, is licensed in Hungarian:

- (ii) a. A cipőmet_i leguggoltam [_{CP} hogy bekössem t_i].
 the shoe-POSS.1SG-ACC PV-crouched-1SG that PV-tie-SUBJ-1SG
 'My shoes, I crouched down to tie.'
 b. *Mit guggoltál le [_{CP} hogy bekössél t_i]?
 what-ACC crouched-2SG PV that PV-tie-SUBJ-2SG
 'What did you crouch down to tie?'

Speaker (A) systematically rejects (iia) as well, while speaker (B) does not. Note also that for speaker (B) the correlative pattern (example 55, 56 below in the main text) is only fine across when-clause contexts (i) and purpose clauses (iia), (see fn. 17), but not across nominal relatives.

¹⁵ The explanation behind these grammatical cases of extraction out islands is unclear to the. The presentational context and the non-specific nature of the head nominal are prerequisites, not only in Hungarian but also in other languages where similar phenomena occur. Note for example the contrast in the English (ia) and (ib) from Levine (2005), who attributes the effect to processing factors:

- (i) a. This issue is something I can never find anyone I can argue with about.
 b. *??This issue is the problem which I can never find the physicist who I can argue with about.
 The Hungarian facts are fully paralleled by Norwegian topic-extraction cases, too (Engdahl 1997).

- (54) *Kiket/*A LÁNYOKAT volt koncert, [_{RC} amire ingyen beengedték].
 who-PL-ACC/the girls-ACC was concert REL-what-TO freely PV-admitted-DEF.3PL
 lit. 'Who are those/It was the girls who, there were concerts, where they were admitted for free?'

Notice that the two word order patterns with correlatives show the exact same split with topicalization-licensing presentational CNPs. When the CorCP+Dem-XP take part in the topicalization pattern (52a, corresponding to 46), extraction across presentational CNPs is grammatical, and when the Dem-XP is in focus (52b, 47), extraction is out:

- (55) [_{CorCP} Aki korán jött], azt volt koncert, [_{RC} amire ingyen beengedték].
 REL-who early came that-ACC was concert REL-what-TO freely PV-admitted.DEF.3PL
 lit. 'Those who came early, there concerts where they were admitted for free.'
 (56) * [_{CorCP} Aki korán jött], AZT volt koncert, [_{RC} amire ingyen beengedték].
 REL-who early came that-ACC was concert REL-what-TO freely PV-admitted-DEF.3PL
 lit. 'Those who came early, there concerts where they were admitted for free.'

The difference in extraction possibilities exhibited in these examples reinforces the conclusion we drew on the basis of the extraction facts in (46)-(51): long distance correlatives are derived by movement of (at least) the Dem-XP, when these are found in the same clause as CorCP. Dem-XP movement can be long topicalization, or long focusing.

3.3.2. Locality effects with long distance correlativization II: CorCP and Dem-XP in different clauses

Before turning to the actual data involving CorCP and Dem-XP across clause boundaries, some notes of caution is in order. First, the separation of CorCP and Dem-XP that these configurations bring about present a slight degradation of judgements compared to those in the previous section. This is due to the effect that mentioned in section 3.2. above: non-adjacency between CorCP and Dem-XP *always* results in a slight degradation of grammaticality. When CorCP and Dem-XP are found across clausal boundaries, the same effect is present as well. This affects all cases to be seen in this section (indicated with the ? mark). Second, it ought to be mentioned that speaker variation concerning the data about to be presented in this section is slightly more robust than the negligible variation one might find elsewhere in correlativization data. To keep the presentation transparent I will proceed to describe and analyze the pattern that I found was shared by 8 of my 13 consulted speakers. The variation found among the other 5 who do not always share these judgements will be addressed in footnotes. Such partitioning of results is motivated by the fact that the judgements of the 8 speakers were *uniform* and *systematic* throughout, while the judgements of the other five speakers were systematic in 3 cases, and non-systematic in 2 cases. I will only address the systematic cases below.

After these introductory notes, let us turn to the patterns themselves. A finite clause intervening between CorCP and Dem-XP is grammatical (modulo the slight degradation due to non-adjacency) both with the topic and the focus order:

- (57) ? [_{CorCP} Aki korán jön], Péter hallotta, hogy azt ingyen beengedik.
 REL-who early comes Péter heard that that-ACC freely PV-admit-3PL
 'Péter heard that those who come early, are admitted for free.'
 (58) ? [_{CorCP} Aki korán jön], Péter hallotta hogy AZT engedik be ingyen.
 REL-who early come Péter heard that that-ACC admit-3PL PV freely
 'Péter heard that it is those who come early, who are admitted for free.'

If the intervening clause contains a complex noun phrase island, the sentence is ungrammatical with both the topic and the focus order:¹⁶

¹⁶ The type of example (59) demonstrates is judged with a subtle variation (it was indicated with % in Lipták 2004, which was based on a survey with few number of speakers than the present study). The majority of the speakers I consulted for present paper rejected these data.

- (59) %*[_{CorCP} Aki korán jön], Péter hallotta a hírt, hogy azt ingyen beengedik.
REL-who early comes Péter heard the news-ACC that that-ACC freely PV-admit-3PL
'Péter heard the news that those who come early, are admitted for free.'
- (60) *[_{CorCP} Aki korán jön], Péter hallotta a hírt, hogy AZT engedik be ingyen.
REL-who early comes Péter heard the news-ACC that that-ACC admit-3PL PV freely
'Péter heard the news that it is those who come early, who are admitted for free.'

Given that definite CNP islands are indicative of movement in Hungarian (see (50),(51) above), the data in (59)-(60) present us with unavoidable conclusion that there is movement involved across the islands in these cases. Since Dem-XP's did not leave the most embedded clause, this can only be due to the correlative clauses themselves moving. What kind of movement do they undergo?

Definite CNPs islands are strong islands for *wh*- and topic-movement as well, so they are not good testing ground for differentiating between the two. A good testing ground are topicalization-licensing *presentational CNPs*, which were introduced in the previous section. As the following examples illustrate, these sentences are grammatical (again, modulo non-adjacency degradation), regardless of the position Dem-XP occupies in the most embedded clause, topic (61a) or focus (61b):¹⁷

- (61) ?[_{CorCP} Aki korán jött], volt koncert, [_{RC} amire azt ingyen beengedték].
REL-who early came was concert REL-what-TO that-ACC freely PV-admitted-DEF.3PL
lit. 'Those who came early, there were concerts where they were admitted for free.'
- (62) ?[_{CorCP} Aki korán jött], volt koncert, [_{RC} amire AZT engedték be ingyen].
REL-who early came was concert REL-what-TO that-ACC admitted-DEF.3PL PV freely
lit. 'Those who came early, there were concerts where they were admitted for free.'

(61) shows long distance relativization with a Dem-XP in embedded topic position, and (62) shows the same when Dem-XP is in embedded focus. These key examples immediately answer our question posed above, about the type of movement that correlatives take part in. Since *presentational CNPs* only let topics through, both examples have to involve an overt step of topicalization, by the correlatives themselves, as indicated in (63):

- (63) a. [_{CP2} [_{CorCP} ...Rel-XP...]_i ... [_{NP} [_{CP1} [_{CorCP} ...Rel-XP...]_i [_{TopP} Dem-XP_k [Dem-XP_k ...]]]]
b. [_{CP2} [_{CorCP} ...Rel-XP...]_i ... [_{NP} [_{CP1} [_{CorCP} ...Rel-XP...]_i [_{FocP} Dem-XP_k [Dem-XP_k ...]]]]

That is, both CorCP and Dem-XP move in both cases: CorCP undergoes topicalization from the left periphery of the most embedded clause to the left periphery of the matrix. Dem-XP on the other hand undergoes short movement in the base clause, either via topicalization (63b) or focusing (63b).

3.3.3. Locality effects as a result of (covert) Dem-XP raising?

Before closing this section, it is important to note that the data in (61)-(62) help us exclude a possible scenario for the observed island effects. Recall the *high-adjunction+Dem-XP-movement* analysis of Izvorski (1996) for South Slavic facts, which was briefly introduced as analysis (Aiii) in section 3.1. above. According to this analysis, correlatives are base-generated adjoined to CP and the locality

¹⁷ The data in (61) and (62) were rejected by 3 speakers in my sample systematically. One was speaker A, who rejects topicalization across all types of presentational CNPs in general with normal topics, too (see fn. 14). The second one was speaker B, who accepts topicalization across CNPs across existential *when*-clauses only (see fn 14 again for illustration of these). Speaker B accepted relativization only across *when*-clauses, too:

- (i) [_{CorCP} Aki korán jött] volt [_{RC} amikor azokat ingyen beengedték].
REL-who early came was REL-when those-ACC freely PV-admitted-DEF.3PL
lit. 'Those who came early, there were occasions, when they were admitted for free.'

The third speaker (speaker C) accepted ordinary topicalization across all types of presentational CNPs in general, but allowed correlatives in *when*-clause extractions only, as in (i).

As the reader can verify, my analysis of correlative topicalization in terms of topicalization is supported with the judgements of speaker A and B. Speaker C, for whom correlatives have to comply with stronger restrictions than ordinary topics remains unaccounted for.

effects are due to overt or covert A-bar movement of Dem-XP to Spec,CP, along the lines of (31) repeated here from above:

- (31) [_{CP} [_{CorCP} ... Rel-XP ...]_i [_{Dem-XP}_i] [_{CP} ... {~~Dem-XP_i~~...}]

The Hungarian structures under this analysis would be (64a) for topic Dem-XPs and (64b) for focused ones:

- (64) a. [_{CorCP} ...Rel-XP...]_i [_{TopP}(in CP₂) *Dem-XP*_i [_{CP}₁ [_{TopP} ~~*Dem-XP*_i~~ [...]]]] topicalization at LF
 b. [_{CorCP} ...Rel-XP...]_i [_{FocP}(in CP₂) *Dem-XP*_i [_{CP}₁ [_{FocP} ~~*Dem-XP*_i~~ [...]]]] focusing at LF

For the Hungarian data at hand this analysis would mean that Dem-XP has to raise covertly to the matrix clause. This, however, runs into difficulties as it predicts that covert movement of the Dem-XP, if it existed, would result in different locality effects in the two cases. Recall that in (61), *azt* is a topic in the base, and is thus expected to raise as a topic at LF, too, while in (62), *azt* is a focus and is thus expected to raise as a focus. Although there is little known about the properties of covert topicalization and focusing in Hungarian, it is likely that they give rise to *different* locality properties, corresponding to the different properties of their overt equivalents. Given that (61) and (62) do not exhibit any difference in locality, we have to conclude that they do not involve covert movement by the demonstrative items. Instead, it is the correlatives that move themselves, and in uniform topicalization in both cases.

In this connection it has to be noted that the LF-movement account does not hold for all dialects of Serbian, either, the language it was proposed for by Izvorski (1996). On the basis of data from the three informants I consulted, there is evidence for two distinct Serbian dialects, which treat correlatives differently. One is the dialect in conformity with Izvorski's claims and data (I will refer to this as *Serbian B* because it belongs to one informant only), the other dialect (*Serbian A*, spoken by the other two informants) patterns fully with Hungarian.

Izvorski's most important factual evidence for proposing overt *wh*-movement of Dem-XP in Serbian comes from the observation that this language, being a language where overt *wh*-movement only affects one *wh*-phrase (see Rudin 1988), it is impossible to front more than one Dem-XPs into the highest Spec position of the sentence in multiple relatives:

- (65) a. ?*[_{CorCP} Kome se kako predstaviš] *taj tako* misli da treba da te tretira.
 whom REFL how present- REFL he thus thinks that should to you treat
 b. [_{CorCP} Kome se kako predstaviš] *taj* misli da *tako* treba da te tretira.
 whom REFL how present- REFL he thinks that thus should to you treat
 'The way you treat yourself. this is how people think they should treat you.'

This pattern is characteristic of *Serbian B* only, but not of *Serbian A*: my two informants belonging to *Serbian A* do *not* confirm this difference. Both of them accept (65a) and (65b) as fully grammatical sentences, and one of them actually prefers (65a) to (65b). This is clear evidence that in there dialect Dem-XPs do not raise as *wh*-phrases to Spec,CP. Interestingly, we can provide evidence that *Serbian A* moves Dem-XPs as *topics*. This can be shown with the help of locality effects across presentational CNP islands. These kind of islands let topicalization through in *Serbian A*, as shown in the contrast between the topicalization case in (66) and the *wh*-movement case in (67):

- (66) Ovog čoveka nema policajca [_{RC} koji ne bi uhapsio].
 this-ACC man-ACC not-have policeman-GEN which not would arrest.PTC
 'This man, there is no policeman who wouldn't arrest him.'
 (67) *Koga nema policajca [_{RC} koji ne bi uhapsio]?
 who.ACC not-have policeman-GEN which not would arrest.PTC
 'Whom is there no policeman who wouldn't arrest him?'

The same context licenses correlatives for my Serbian A speakers, with Dem-XP left inside the base clause:

- (68) [_{CorCP} Ko parkira ovde] nema **policajca** [_{RC} koji tog ne bi kaznio].
 who parks here not-have policeman-GEN who that-ACC not would fine.PTC
 'Who parks here, there is no policeman who wouldn't fine that person.'

(68) is thus fully parallel to (68) and forces the conclusion that in *Serbian A* correlatives also involve topicalization by the correlative clause itself, just like Hungarian. Note that independently of the movement of CorCP, it is possible to *focus* the correlative pronominal, as evidenced by the interpretation of (69) and heavy stress on *to* 'that' in the following example:

- (69) [_{CorCP} Sto Jovan hoce jesti], TO mu zena skuva.
 what Jovan wants eat-INF that CL-DAT wife cooks
 'Whatever Jovan wants to eat, that is what his wife cooks for him.'

This suggests that the Serbian A dialect is *fully* parallel to Hungarian: Dem-XPs can undergo topicalization or focusing, and CorCP can undergo topicalization long distance.

Returning to the patterns established by *Serbian B*, note that next to the judgements indicated above in (63)-(64), sentences (65), (66), (67) are all ungrammatical for this informant. This state of affairs can be interpreted in line with Izvorski's claim that Dem-XPs undergo *wh*-movement in this dialect. As a result, movement of two Dem-XPs is dispreferred in complex clauses, and presentational CNP islands block this movement as well (given that they block *wh*-movement, see (67)). If this is why (67) and (68) are ungrammatical for this informant, the fact that (66) is ungrammatical, too, is an unrelated fact of the language. There is however, another way of interpreting the same facts. If the judgements on (63)-(64) are *not* indicative of *wh*-movement unlike Izvorski believes, the ungrammaticality of both (65) and (67) is actually compatible with the idea that Dem-XPs are topicalized: they are ruled out in the same contexts as topics.

Returning to Hungarian and summing up the results, in this section I have reviewed locality effects with long distance correlativization in Hungarian and Serbian and arrived at the conclusion that they unambiguously argue for the topic movement of the correlative clauses. These clauses are not base-generated in the position they appear in but undergo movement. The situation is summarized in (63) repeated here for convenience:

- (63) a. [_{CP2} [_{CorCP} ...Rel-XP...]_i (...)] [_{CP1} [_{CorCP} ...Rel-XP...]_i] [_{TopP} Dem-XP_k] [_{Dem-XP_k} ...]]]
 b. [_{CP2} [_{CorCP} ...Rel-XP...]_i (...)] [_{CP1} [_{CorCP} ...Rel-XP...]_i] [_{FocP} Dem-XP_k] [_{Dem-XP_k} ...]]]

3.4. Conclusion: the fine structure of correlativization

Recapitulating, in the previous sections I presented data illustrating locality effects found with correlatives. First, I looked at patterns in which correlative and Dem-XP are adjacent but dislocated out of the clause they belong to. Locality effects in these cases are characteristic of topicalization in cases where Dem-XP occupies a topic position, and characteristic of focusing in cases it occupies focus. For the movement of the CorCPs in these structures there is no unambiguous evidence:

- (52) a. [_{CorCP} ...Rel-XP...]_i [_{TopP(inCP2)} Dem-XP_k] [_{CP1} ~~Dem-XP_k~~]]] topicalization of Dem-XP
 b. [_{CorCP} ...Rel-XP...]_i [_{FocP(inCP2)} Dem-XP_k] [_{CP1} ~~Dem-XP_k~~]]] focusing of Dem-XP

Second, I looked at patterns in which correlative and Dem-XP are found in adjacent clauses. These display locality effects that are characteristic of *topicalization*, regardless of what position Dem-XP occupies in the lowest clause. This unambiguously argues for long topic fronting of the CorCPs themselves. Next to these, overt movement of Dem-XP takes place in the base clause:

- (63) a. [_{CP2} [_{CorCP} ...Rel-XP...]_i (...)] [_{CP1} [_{CorCP} ...Rel-XP...]_i] [_{TopP} Dem-XP_k] [_{Dem-XP_k} ...]]]
 b. [_{CP2} [_{CorCP} ...Rel-XP...]_i (...)] [_{CP1} [_{CorCP} ...Rel-XP...]_i] [_{FocP} Dem-XP_k] [_{Dem-XP_k} ...]]]

(72) [_{CP2} ([_{CorCP}]) [_{TopP/FocP} (*Dem*) [_{CP1} [_{CorCP}] ... [_{TopP/FocP} *Dem*_i [... t_i...]]]]]

In section 4 we will further refine this structure, after looking at the interpretive side, and the relevance of topicalization. Before turning to these issues, we still need to clarify the last issue left in connection with locality effects: that of reconstruction effects.

3.5. Reconstruction effects once again

As section 3.2 has shown, binding data in simplex clauses unambiguously show that correlative clauses do not reconstruct to lower positions within a simplex sentence in Hungarian. Pronominal binding indicates lack of reconstruction, too. In the following examples, the relative pronominal cannot be bound by the matrix clause subject:

(73) [_{CorCP} Amelyik lány megcsókolta *pro*_{obj,i}], *abban* minden fiú_i megbízik.
 REL-which girl kissed that-IN every boy trusts
 '*Every boy_i trusts the girl who kissed him_i.'

This is fully consonant with the idea that correlatives are merged at the left periphery in their base-clause, and thus do not show reconstruction to lower positions.

Having seen though that the position correlatives occupy when they are *not* in their base clause is reached by movement, we expect that reconstruction effects are displayed in these long distance correlativization cases. The more because ordinary topicalization in Hungarian *does* exhibit reconstruction effects (contra É.Kiss 1992):

(74) *Alex_i könyvét TEGNAP nem *pro*_{subj,i} olvasta.
 Alex book-POSS.3SG-ACC yesterday not read
 'Alex_j's book, it was yesterday that he_i did not read.'

The topicalized object *Alex könyvét* 'Alex' book-ACC contains an R-expression, and this cannot be coindexed with the subject of the sentence, indicating that reconstruction took the object back to a position where it is c-commanded by the subject.

The expectation that correlatives in complex sentences show reconstruction effects is *not* born out though. Consider the following example, in which the correlative appears to the left of a matrix clause:

(75) ?[_{CorCP}Akit kedvel Mari_i], úgy gondolja *pro*_{subj,i} hogy *azt*_i más is kedveli.
 REL-who-ACC likes Mari so thinks that that-ACC other also likes
 'Mary thinks that the person she likes, other people also like.'

The available coreference between the subject of the matrix clause and *Mari* embedded inside the correlative shows that the relative does not reconstruct back into the position adjoined to the embedded CP, from which it supposedly originates, at least according to the testimony of locality effects reviewed above.

Do these facts contradict the findings of the previous sections? Fortunately not, or not necessarily. Lack of reconstruction seems to characterize *any relative clause* that appears in the left periphery of Hungarian, including those that are headed relatives. Observe the following example:

(76) A legutóbbi könyvet [_{RC}amit Alex_i írt], *azt* *pro*_{subj,i} nem olvasta még újra.
 the last book-ACC REL-what-ACC Alex wrote that-ACC not read yet again
 'The book Alex wrote last, he did not read again yet.'

The DP containing a relative clause does not reconstruct back into any lower position, which results in the fact that the R-expression within the relative can be freely coindexed with the subject of the main clause.

It is not clear to me whether it is the same explanation that underlies lack of reconstruction with correlatives and headed relatives. For headed relatives it is possible to resort to late merge of adjuncts

(Lebeaux 1998), but for correlatives, this is not an available option. While the headed pattern can be derived from the postcyclic merge of the relative clause to the head DP, thereby circumventing binding violations, correlatives cannot be late-merged in the same fashion, because they do not have a nominal to merge to.¹⁹

Fortunately though correlatives and headed relatives are not the only constituents that fail to reconstruct from the left periphery of Hungarian. Some adverbial clauses do the same. Beside those that are syntactically relative clauses and thus are predicted to pattern with headed and correlatives, non-relative types, like purpose adjunct clauses do not reconstruct, either (Kenesei 1992):

- (77) [_{CP} Hogy Alex_i el ne fáradjon], pro_{subj,i} leült.
 that Alex PV not tire-SUBJ.3Sg PV-sat
 'So that he should not get tired, Alex sat down.'

It is thus possible that in the domain of reconstruction effects, correlatives pattern with these type of adjunct clauses and have independent reasons for not reconstructing.

4. The role of topicalization

With the structure of Hungarian correlativization in place, this last section turns to issues concerning interpretation, in the quest for making the structural representation of correlatives even more precise.

The most important finding of the previous section was that correlative clauses undergo topicalization, a movement characteristic of topic constituents. Since topicalization is discourse driven, we expect that the topic syntax of correlatives is coupled with the interpretation of topics as well. That is, correlatives do not only move as topics, they *are* topics themselves. It will be shown that this is indeed the case and that syntax and semantics go hand in hand as expected.

On the other hand, while correlatives can undergo topicalization characteristic of ordinary topics, the position they occupy is not that of Spec,TopP. That is, they do not merge into a base Spec,TopP position in their clause and they do not move to higher Spec,TopPs, either, as shown in (78):

- (78) [_{TopP}(CP₂) ([_{CorCP}]_j) [_{TopP}/FocP (*Dem*_i) [_{CP}₁ [_{TopP} [_{CorCP}]_j ... [_{TopP}/FocP (*Dem*_i [... t_i...])]]]]]

Instead, their position is similar to *left dislocated* elements. This is in line with the fact that they take part in a special topicalization strategy: that of *simplifying* left dislocation. To make things even more complicated, as far as their syntax is concerned, correlatives do not share *all* their properties of DP-left dislocations in Hungarian, forcing the conclusion that correlatives are a *special* left dislocation strategy that is unattested with other types of constituents in Hungarian.

4.1. The discourse structure and interpretation of correlatives: topics and left dislocates

It is easy to see that correlatives are sentence topics under the definition of *aboutness* topics: elements which the sentence (or more precisely the comment part of the sentence) is about. This is also the role É.Kiss (1987, 1992) attributes to Hungarian topics: they are subjects of the main predication of the clause, which is done by the comment. Consider our first correlative example from above, (3):

- (3) [_{CorCP} Aki korán jött], azt ingyen beengedték.
 REL-who early came that-ACC freely PV-admit-PAST.3PL
 'Those who come early were admitted for free.' = 'As for people who came early, they were admitted free.'

¹⁹ Hypothesizing a dummy placeholder nominal in the case of correlatives is not an option, either: correlatives are *not* headed (see section 2.2.s above).

It is possible to interpret this sentence as being about people who came early, with the predication that they were admitted free.

It is important to note when characterizing correlatives as aboutness topics, that we need to make a distinction between *aboutness* topics and *frame-setting* topics (both these types often translate into 'as for' topics in English): correlatives cannot be frame-setting. The relation between an aboutness topic and the rest of the sentence is stronger than that between a frame-setting topic and its clause (as pointed out by Dayal 1996):

(79) As for fish, I like cod.

Correlatives cannot express such relations due to the fact that their pronominal correlate is necessarily part of the main clause.²⁰

Aboutness topics need not carry old information (Reinhart 1981). The same holds for correlatives. Correlatives can convey old information: (3) for example can be foregrounded in the conversation if people who arrived late are previously mentioned. However, correlatives can also be *shifting* topics, i.e. those which carry discourse-new information. Consider for example the following conversation about a concert:

- (80) a. Where did you get tickets for the concert? [question]
 b. [_{CorCP} Aki korán ment], azt ingyen beengedték. [answer]
 REL-who early went that-ACC freely PV-admit-PAST.3PL
 'Those who come early were admitted for free.'

In this case the correlative does not provide old information, as people who came early for the concert are not mentioned in the discourse before.

It seems then that correlatives are (old or new information) aboutness topics, at least in the cases covered so far, which syntactically all featured Dem-XP in a topic position. So for these sentences, generating the correlative in the topic position already in the base clause (see 81a) seems to be well founded:

- (81) a. ✓ [_{TopP} [_{CorCP}]_j ... [_{TopP} Dem-XP_i [... t_i...]]]] correlatives with a topicalized Dem-XP
 b. [_{?P} [_{CorCP}]_j ... [_{FocP} Dem-XP_i [... t_i...]]]]

The question then is, what is the position of correlatives in (81b), the position correlatives occupy when their Dem-XP is in focus, like in (38)?

- (38) ?[_{CorCP} Aki korán jön], AZT engedik be ingyen.
 REL-who early comes that-ACC admit-3PL PV freely
 'It is those who come early whom the organizers admit for free.'

Can CorCP be in Spec,TopP, too? It can be shown that it cannot. Strong evidence *against* a TopP analysis comes from the distribution of non-nominal correlatives.

Hungarian topics can only be referential constituents (É.Kiss 1987). Predicative adjectives or degree phrases for example cannot be topics, as illustrated in (82), (83):

²⁰Besides, Hungarian does not frame setting topics like (79):

- (i) *_{[RC} Aki korán jött], szeretem a pontos embereket.
 REL-who early came like-1SG the punctual people-ACC
 'As for people who came early, I like people who arrive on time.'

- (82) *Magas A FELADATHOZ volt Péter.
tall the task-FOR was Péter
'It was the task that Péter was tall for it.'
- (83) *Nagyon ANNA aludt el.
very.much Anna slept PV
'It was Anna who long overslept.'

(82) involves the predicate *magas* 'tall' in topic position. The presence of focus in the sentence insures that the position of this item is that of a topic. The sentence cannot be pronounced with ordinary topic intonation on the predicate. (83) shows the same phenomenon with a degree quantifier, *nagyon* 'very.much'. This item cannot be topicalized, just like the predicate in (82). Predicative phrases and DegPs are systematically excluded from topic positions because they are not referential.²¹

Exactly parallel to these items, predicative and degree correlatives (i.e. correlatives formed with predicative and degree relative pronouns) *cannot* take part in a structure in which their Dem-XP is a topic, as a result of the fact that Dem-XP, a non-referential item is in the topic position. Consider (84a,b):

- (84) a. *[_{CorCP}Amilyen Péter], *olyan* MARI.
REL-how Péter such Mari
'What(ever) Péter is like, Mari is such (and not Katalin).'
- b. *[_{CorCP}Amilyen nagyon elaludt], *olyan gyorsan* elkészült Anna.
REL-how much over.slept so quickly PV-prepared Anna
'How badly Anna overslept, she got ready that quickly.'

Both examples are constructed such that *olyan* and *olyan gyorsan* can only receive a topic reading: this is forced by the focus on *Mari* in (84a) and by the neutral word order (PV-V) in (84b). As expected, exactly parallel to (82) and (83), these sentences are out as the Dem-XPs cannot function as topics.

Nevertheless, correlatives themselves are not ruled out occurring in the sentence initial position. They are perfectly fine there, but if and only if their Dem-XP is in focus position:

- (85) a. [_{CorCP} Amilyen Péter], *OLYAN* Mari is.
REL-how Péter such Mari also
'What(ever) Péter is like, SUCH is Mari, too.'
- b. [_{CorCP} Amilyen nagyon elaludt], *OLYAN* gyorsan készült el Anna.
REL-how much over.slept such quickly prepared PV Anna
'How much (=how badly) Anna overslept, so quickly she got ready.'

Since focus can operate both on referential and non-referential items, the non-referentiality of *olyan* here does not cause ungrammaticality.

Now given that the correlatives themselves in (85) are also non-referential entities, they should also be excluded from topic positions, just like *olyan* in (84a,b). The fact that they are *not* ungrammatical in (85) suggest that they do *not* occupy topic positions. If they did, we would expect these sentences to be ungrammatical, contrary to facts.²²

²¹ The only way to get both (82) and (83) grammatical is to pronounce the predicate/DegP with rising contrastive intonation, characteristic of left dislocation, a strategy which is syntactically distinct from topicalization (see section 4.2 below).

²² Note that they do not share the distribution of ordinary *topics* in another respect, either. They cannot be preceded by other topics, recall (32) from above:

- (32) ??A szervezők [_{CorCP} aki korán jön] azt ingyen beengedik.
the organizers REL-who early comes that-ACC freely PV-admit-3PL
'Those who come early, the organizers admit for free.'

Ordinary topics can freely be preceded by other topics. The fact that correlatives linearly occur to the *left* of other topic material in the clause is consonant with our finding that they can be *shifting* topics (new information topics). As Herring's (1990) typological survey shows, shifting topics precede continuity (old information) topics in languages.

If they do not occupy a Spec,TopP position, what position do they occupy? The position we are looking for should be available to *aboutness topics*, but seem not to be Spec,TopP position. I believe what we are looking for is the position of elements that are dislocated in what Prince (1998) refers to as *simplifying left dislocations*.

Simplifying left dislocation is a type of left dislocation in which the left dislocated element simplifies the processing of entities occurring in the lower structure of the clause. Prince (1998) defines the simplifying role of left dislocation in the processing of discourse-new entities in the following way:

- (86) "[simplifying left dislocation] ... serves to simplify the discourse processing of discourse-new entities by removing the NPs evoking them from a syntactic position disfavoured for NPs evoking Discourse-new entities and creating a separate processing unit for them. Once that unit is processed and they have become discourse-old, [...] the pronouns which represent them, may comfortably occur in their canonical positions within the clause"

The role of such left dislocated elements is to "lift the burden off" the sentence-internal left periphery by placing new information into a separate discourse unit in the higher left periphery. Consider for example the following example, taken from English:

- (87) He started fussing with my sister and she started to scream. *The landlady, she* went up to and laid her out.

The landlady provides new information, followed by the resumptive *she*, which then qualifies as old information.

The above notion of simplifying left dislocation fits correlatives like a glove. Simplifying left dislocates, like any dislocated elements, are *aboutness topics*, just like correlatives. They can introduce new information, just like correlatives. Therefore it is possible to analyze correlatives in terms of the discourse structure of simplifying left dislocation:

- (88) [_{Simpl.LD=new} [_{CorCP ...Rel-XP...}] [_{TopP} [_{old Dem-XP}] [...]]]

While Prince only deals with new information "simplifiers", I believe the notion can be extended to other kinds of simplifying processes, and other kind of correlatives as well. One extension I want to propose, specifically for correlatives with focused Dem-XP's, is simplifying in *phonology*.

Kenesei and Vogel (1989) show that clausal material is in general excluded from the Hungarian focus position due to the fact that focus stress cannot distribute over a whole clause. Although free relatives can occur in focus positions, they are much better elsewhere. Having DPs in the focus position, on the other hand is no problem for phonology. With this idea in mind it is possible to analyze correlatives as items that simplify the *pronunciation* of sentences with focus on relative clause material. Spelling out the content of the relative to the left of the clause and leave Spec,FocP over to a single phonological word, Dem-XP:

- (89) [_{Simpl.LD} [_{CorCP ...Rel-XP...}] [_{FocP} [_{DEM-XP}] [...]]]

Concerning the properties of discourse it then seems advantageous to analyze correlatives as dislocated clauses that have a simplifying role, and which are *aboutness topics*. The simplifying role of correlatives can be multifold: it can be relevant for the processing of old/new information or can ease the PF spell out of the structure. There could even be further, yet undiscovered simplifying roles that correlatives can have. In order to arrive as the most restrictive theory, I propose to treat *all* occurrences of correlatives as those taking part in a simplifying discourse structure and assign them the discourse structure in (90):

- (90) [_{Simpl.LD} [_{CorCP ...Rel-XP...}] [_{TopP/FocP} [_{Dem-XP}] [...]]] discourse structure of correlatives

Reasons to treat all correlatives alike come primarily from the observation that *syntactically* there does not seem to be a difference between correlatives of various types, regardless of what kind of simplifying role they have, in the syntax they come out the same. It could be possible that the syntactic structure that underlies the discourse structure in (90) is available even in cases where the correlative simplifies vacuously.

The syntactic structure underlying (90), will be specified in the next section.

4.2. Back to the syntax: correlativization as left dislocation?

The preceding section showed that the discourse role of correlatives is that of aboutness topics, but their syntactic position is not that of Spec,TopP. Instead, they act like left dislocated constituents that have the role of simplifying the preverbal left periphery. The link between left dislocated elements and correlatives is not only there at the level of discourse, but is also present at the level of syntax, as well, to a large extent. This section turns to the syntax side again to see if correlatives can be put under the umbrella of left dislocation in general. If it can, correlativization can be subsumed under the (typologically more wide-spread) phenomenon of left dislocation, which would be a welcome result in our attempt to reduce linguistic variation to the minimum. If it cannot however, correlativization needs to be treated as a construction on its own.

Before turning to the details of a close syntactic comparison, a brief introduction to left dislocation in Hungarian is in order. The resumptive element used in left dislocation is the distal demonstrative pronoun *az* 'that', which agrees in case with the left dislocated constituent. Some speakers can also use the personal pronoun *ő* 'he/she' as the resumptive, but this element is losing ground to *az* 'that' in present-day Hungarian:

- (91) Tegnap √Pétert azt INGYEN beengedték.
 yesterday Péter that-ACC freely PV-admitted-3PL
 'Yesterday, Péter was admitted for free. (While other people might not have been.)'

As the translation indicates, left-dislocated elements can imply contrast. In the phonology, this contrast comes out as rising intonation followed by a short pause (marked by √ in the following examples) Next to this intonation surplus, sentences with contrastive left dislocation need to contain an operator element (the focus in 91).

Next to contrastive left dislocation, in spontaneous, oral discourse we also find left dislocates without the above mentioned contrastive reading, and without the accompanying characteristic intonation. In these contexts, the non-contrastive left-dislocated phrase is used to mark a new information unit, akin to simplifying left dislocation in the previous section:

- (92) Erre Péter, az fogta magát és elszaladt.
 then Péter that took himself-ACC and away-run
 'Then Péter, he went and ran away.'

Péter introduces the new discourse unit which is referred to, as old information, by *az*. In this case the presence of operators in the sentence is not necessary. When comparing correlatives to left dislocation in the next section, simplifying left dislocations like (92) will be used for comparison, since they are closer in meaning to correlatives than contrastive left dislocates. The idiomatic expression 'fogta magát' lit. *took himself*'went and ...' will be used to imitate colloquial use.

4.2.1. Similarities between left dislocation and correlativization

Next to the striking presence of resumptive nominals both in correlativization and left dislocation, these two strategies share some other properties as well, most importantly the distribution in embedded clauses and uniqueness.

Apart from being sentence initial, both can be freely embedded in a *that*-clause, as shown in (93) and (33), from above:

- (93) Azt mondják, hogy Péter, az fogta magát és bement.
 that say-3PL that Péter that took himself and entered
 'They say that Péter went and entered.'
- (33) Péter hallotta, hogy [_{CoRCP} aki korán jön], azt a szervezők ingyen beengedik.
 Péter heard that REL-who early that-ACC the organizers freely PV-admit-3PL
 'Péter heard that those who come early, the organizers admit for free.'

And even though finite clauses are fine, neither can be embedded in a relative clause, as shown in (34) and (90):

- (94) ??*a koncertre, amire Péter, az fogta magát és bement...
 the concert-TO REL-what-to Péter that took himself-ACC and entered
 'the concert, to which, as for Péter, he went and entered'
- (95) ??*a koncertre, amire [_{CoRCP} aki korán jön], azt ingyen beengedik...
 the concert-TO REL-what-to REL-who early comes that-ACC freely PV-admit-3PL
 'the concert, to which, people who come early, are admitted for free'

Also, both left dislocates and correlatives are unique constituents of their clause, there cannot be more than one of them present:

- (96) *A koncertre arra Péter az fogta magát és bement.
 the concert-TO that-to Péter that took himself and entered
 'As for the concert, as for Péter, he got up and entered.'
- (97) * [_{CoRCP} Aki korán jön], [_{CoRCP} amikor megérkezik], azt ingyen beengedik.
 REL-who early comes REL-when arrives that freely PV-admit-3PL
 'Those who come early, when they arrive, are admitted for free.'

It seems that when it comes to the ability of being embedded as well as uniqueness correlatives are exactly like left dislocated material in Hungarian.

4.2.2. Differences between left dislocation and correlativization

Next to the above similarities, differences between correlatives and left-dislocated items can also be found. These occur in more domains, such as (i) precise syntactic placement, (ii) the obligatoriness of resumptive elements, (iii) adjacency, (iv) focusing possibilities and (v) reconstruction effects. These will be illustrated in a row.

(i) *Syntactic placement.* As was shown in example (91), left dislocates can comfortably follow other, ordinary topics in the Hungarian clause. In contrast to this behaviour, correlatives occur acceptably only to the left of ordinary topics, as was shown in (32) above:

- (32) ??A szervezők [_{CoRCP} aki korán jön] azt ingyen beengedik.
 the organizers REL-who early comes that-ACC freely PV-admit-3PL
 'Those who come early, the organizers will let in for free.'

(ii) *Obligatoriness of the resumptive element.* The nature of the resumptive element we find with left dislocation is partly different from that with correlatives. First of all, correlatives can choose from a larger set of resumptive items: either demonstrative pronominals or full DP nominals containing demonstrative forms (see (3) and (10) above), while left dislocates can only have pronominal resumptives:

- (98) *Péter az a fiú fogta magát és bement.
 Péter that the boy took himself and entered
 'Péter, that boy went and entered.'

Furthermore, there are also many striking differences between Dem-XP we find with correlatives and the resumptive we find with left dislocates. First of all, the resumptive element is optional with left dislocates (both in simplifying and in contrastive left dislocation), but Dem-XP is obligatory with correlatives, unless it bears structural case, and undergoes pro-drop. This property of left dislocation is illustrated in (99) and (100):

- (99) *√Pétert, INGYEN beengedték.
 Péter-ACC freely PV-admitted-3PL
 'Péter, that boy was admitted FOR FREE.'
- (100) a. [_{CorCP} Aki korán jön] ingyen beengedik.
 REL-who early comes freely PV-admit-3PL
 'Those who come early, the organizers will let in for free.'
- b. [_{CorCP} Akit bemutatattál], *(*annak*) köszöntem.
 REL-what-ACC introduced-2SG that-DAT greeted-1SG
 'I greeted the person you introduced to me.'

(iii) *Adjacency of the resumptive element.* The structural conditions on the placement of the Dem-XP/resumptive item differ in the two cases, too. The resumptive element always needs to be adjacent to left-dislocates, as illustrated in (101):

- (101) Péter *(a koncertre) azt fogta magát és bement
 Péter the concert-TO that took himself and entered
 'Péter, he went and entered the concert.'

Dem-XP with correlatives on the other hand can occur separated from the correlative, as was shown in section 3.3 at great detail, recall (35):

- (35) [_{CorCP} Aki korán jön], (*azt*) a szervezők (?*azt*) INGYEN engedik be.
 REL-who early comes that-ACC the organizers that-ACC freely admit-3PL PV
 'Those who come early the organizers admit FOR FREE (and not for money).'

(iv) *Discourse functions.* Dem-XP with correlatives shows a greater flexibility not only when it comes to its positions but also in its discourse functions. As was shown in (38), Dem-XP can freely occur in the focus position. The same is never possible with the resumptives of left dislocates (102):

- (102) *Péter AZ fogta magát és ment be.
 Péter that took himself and entered PV
 'Péter, HE went and entered.'

In the case of left dislocation, the resumptive cannot assume any other discourse function and syntactic position than that of the topic. As the previous section has shown in great detail, this is not the case with correlatives. Their Dem-XP item can either be a topic or a focus.

(v) *Reconstruction.* Correlatives do not reconstruct (see sections 3.2 and 3.5 above). Left dislocated elements obligatorily do as shown by binding principle C effects in (103) and bound pronoun readings in (104):

- (103) *Péter_i könyvét, *azt* még nem pro_i olvasta.
 Péter-POSS.3SG-ACC book-ACC that-ACC still not read-PAST.3SG
 'Péter's book, he_i did not yet read.'
- (104) Az pro_i apját, *azt* mindenki_i szereti.
 the father-POSS.3SG-ACC that-ACC everyone loves
 'Everyone loves his father.'

These examples unambiguously show that at the level where binding relations are computed, the left-dislocated item does not occupy the left-peripheral position in which it surfaces in overt syntax. It has to be reconstructed to a lower position. This is in sharp contrast to the behaviour of correlatives, which do not show reconstruction effects.

4.2.3. Summary of findings

The data covered in the previous two sections show that correlatives and left dislocates share some syntactic properties but not all. The properties that were examined in this regard are listed in the following table.

Table 1. Syntactic properties of left-dislocated constituents and correlatives

<i>Properties</i>		left dislocates	correlatives
embeddability		✓	✓
max. 1 per clause		✓	✓
reconstruction		obligatory	impossible
obligatory clause-initial position		*	✓
resumptive element	type	demonstrative	demonstrative/full DP
	obligatoriness	*	✓ (except NOM/ACC)
	adjacency to item	✓	optional
	focusable	*	✓

As can be seen from the table, both left dislocates and correlatives can be embedded and can occupy a unique position in the left periphery. Both of them can be associated with a resumptive element, which can appear as a demonstrative pronominal. This resumptive element is optional in the case of left dislocates and obligatory with correlatives. The relationship of the resumptive to its ‘host’ is tighter in the case of left dislocates: they have to be adjacent, unlike the Dem-XP of correlatives. Also, the resumptive of left dislocates cannot assume any position or logical functions, but that of topic. Correlatives on the other hand are free to have focused Dem-XPs. Position-wise, left dislocates seem to occupy a lower position than correlatives: the latter have to be initial constituents in their clause, while left dislocates can freely be preceded by other topics. Unlike correlatives, which do not reconstruct, left-dislocated elements necessarily do.

This in turn means that the structure of DP-left dislocation and correlatives is not the same. Correlatives have to precede the TopP field, while left dislocated elements have to follow it:

(105) [_{CP} CorCP [_{TopP*} (Dem-XP) [_{LDP} LD - Res.-XP [_{FocP} (Dem-XP) [_{VP} ...]]]]

This in itself is a distinction that refutes any analysis that would want to reduce correlatives to ordinary left dislocation structures. The two are not the same and cannot be accommodated in the same syntactic structure. The conclusion to be drawn on the basis of this section is that correlativization is a left dislocation *discourse* strategy with syntactic properties on its own.

Concerning the position of correlatives in the left periphery, this finding helps us only in an indirect way: we know that the position occupied by correlatives is *not* that of left dislocates. As section 4.1 showed above, neither is it that of topics, i.e. Spec,TopP. Since correlatives can be embedded under finite complementizers, this position cannot be an adjoined position to the highest Spec,CP, either. Since we know that the position need to be distinct from all these, and we are also aware that between these positions the correlative can undergo topicalization, we need to hypothesize a position that is *topical* in nature but only available to correlatives. I chose to call it CorTopP (*correlative topic position*):

(106) [_{CorTopP} ([_{CorCP}]_j) [_{TopP/FocP} (*Dem*_i) [_{CP} [_{CorTopP} [_{CorCP}]_j ... [_{TopP/FocP} *Dem*_i [... t_i...]]]]]]
 The Hungarian evidence for such a unique correlative position corroborates the findings in Rebuschi (2001, 2003, in prep) about Basque correlatives, which also occupy a unique position in the left periphery that is most likely not an adjunction position. Note the findings of Den Dikken (2004, to appear), which on the other hand argue for an adjunction analysis for comparative correlatives in Dutch.

5. Conclusions and speculations on crosslinguistic differences

This paper took a close look at single correlatives in Hungarian and uncovered some of their structural and discourse properties in detail. As far as discourse properties are concerned, it was pointed out that Hungarian correlatives have the interpretation of aboutness topics and can be taken to have the discourse role of simplifying left dislocated elements. As far as their syntax is concerned, many properties of correlatives were uncovered that all point to the same direction: correlatives only occur in the left periphery of their clause and as a result, also start out merged there. The Dem-XP element whose meaning these relative clauses modify are also necessarily left periphery elements, that can occupy either the focus or topic positions. Since these Dem-XP elements walk and talk like ordinary topic and focus constituents, they can be taken to be merged in their (VP-internal) base position and to raise to these positions in overt syntax.

Next to the above, the most important finding of the present paper (also when compared to Lipták 2004) is that correlatives are mobile constituents. When in complex sentences, they can optionally undergo *topicalization*. This was tested across complex sentence material in two contexts: first when both correlatives and Dem-XP appear dislocated from their original clause, and second, when only correlatives are higher than the matrix predicate. The differences between locality effects in the two cases clearly indicate that there are distinct types of movements taking place. While in the first case locality effects reveal overt topic and focus extraction of Dem-XP elements themselves, in the second case only topicalization was attested. This unambiguously indicates that correlatives can move on their own as topics.

These observations, paired with facts that proved that correlatives are neither ordinary *topics*, nor ordinary *left dislocates* resulted in a general structure that was given in (106), where continuous lines show obligatory movements and dotted lines indicate optional ones:

(107) [_{CorTopP} ([_{CorCP}]_j) [_{TopP/FocP} (*Dem*_i) [_{CP} [_{CorTopP} [_{CorCP}]_j ... [_{TopP/FocP} *Dem*_i [... t_i...]]]]]]


In the observed movement steps Hungarian shows great resemblance to Hindi, where both CorCP and Dem-XP are involved in movement. There are three very important differences between the two languages, though, which concern (i) the optionality of the movements, (ii) complex formation in the base, (iii) the type of movement the correlative and Dem-XP undergoes.

In Hindi all movement steps indicated in (107) are *optional*, while movement of Dem-XP is obligatory in Hungarian. This is clearly linked to the property that there is no evidence in the latter for an initial representation in which CorCP and Dem-XP form a *constituent*, while such evidence can be found for Hindi. Further, the movements in Hindi show properties of *scrambling* (Bhatt 2003), an A-bar process in Hindi.

The types of movement both languages exhibit are not totally unrelated, to the extent that scrambling and topicalization often show similar properties in languages, even though in this case the two cannot be equated as Hungarian topicalization is clearly not A-bar movement (É.Kiss 1992).

Questions about the type of movement aside, where do the other two differences follow from, concerning the optional/obligatory nature of Dem-XP elements and the presence or absence of complex constituent formation respectively?

Note that the OV/VO typological difference between the two languages cannot provide an explanation for such differences. The best evidence for this comes from Northern Basque, also an OV-language, which has correlativization (Rebuschi 2001, 2003). Interestingly, Northern Basque

correlatives are *altogether different* from Hindi and Hungarian in that they do not involve long distance movement of any kind, neither by CorCP, nor by Dem-XP. They exhibit no locality effects even in cases where the most stubborn of islands separate the two. The following complex DP island is perfectly grammatical in Northern Basque (Georges Rebuschi, p.c.):

- (107) [Nork ere huts egiten bait du], [_{DP}[_{CP} hura gaztigatuko du]en] (**gizon**)-a ezgatzuten dut
 who-ERG ever mistake doing *bait* aux that-ABS punish aux-*en* man-SG knowing aux-1SG
 'Whoever makes a mistake, I know the person who will punish *him*.'

Since CorCP and Dem-XP in Northern Basque are not linked by movement, they cannot be base-generated together in the base, either. This in turn shows that the OV-nature of a language is not linked to the necessary presence of complex formation.

Instead, I would like to put forward the claim that the differences between Hindi and Hungarian are due to the fact that Hungarian correlativization is restricted to a particular discourse strategy, that of simplifying left dislocation, which is solely a left-periphery strategy in Hungarian. This involves two distinct items with possibly distinct discourse roles, the complex formation of which is excluded.

Hindi on the other hand uses correlativization as a property of the base, the VP-internal domain. This either follows from the economy principle *local merge* or something even more basic property that prefers the formation of correlatives to headed relatives. The latter property could underly the difference that correlativization in Hungarian is *one* available relativization strategy, but by no means the only one and the most frequently used one. Hindi correlativization on the other hand seems to be overwhelmingly the only strategy of relativization used in speech (Rajesh Bhatt p.c.). As such it is, and it cannot be, a peripheral strategy, unlike in Hungarian.

It could equally well be that the basic structural difference between the two languages follow from the properties of the left periphery in Hindi and Hungarian, more specifically from the kind of left dislocation structures that are available for clausal material in the two languages. In this connection it is interesting to note that left dislocation is an existing strategy in Hindi, too, with properties similar to that of correlatives: left dislocation exhibits movement properties (Chandra 2004). More research is needed to establish whether the optional scrambling movement of CorCP and Dem-XP can be conceived of as a left dislocation structure, and whether the left periphery of Hindi differs in relevant properties from that of Hungarian in this domain.

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