

# Hybrid Coordination in Hungarian and Romanian Multiple *Wh*-Questions

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# Coordination

A syntactic operation that usually includes a conjunction and is based on some repetitive mechanism (Mouret, 2007).

- weak syntactic parallelism concerning category and morphosyntactic features like gender, number, mood, etc., cf. coordination of unlikes (Sag et al., 1985)

(1) Pat is [a Republican and proud of it].

- strong syntactic and semantic parallelism concerning syntactic function and semantic roles: the conjuncts must have the same semantic function and the same semantic role

(2) \*John eats [an apple and at midnight].

## Hybrid Coordinations

Three structures that apparently violate the strong syntactic and semantic parallelism required in coordination (Chaves and Paperno, 2007):

- universal quantifiers

(3) **Oricine** (și) **oricând** poate intra aici. (R)  
 everyone (and) always can enter here

- negative words

(4) **Nimeni** (și) **niciunde** nu este în siguranță. (R)  
 nobody (and) nowhere NEG is in security

- *wh*-phrases (henceforth *wh*-ph)

(5) **Cine** (și) **când** a venit? (R)  
 who (and) when has come

## Multiple *wh*-*ph* cross-linguistically

The hybrid coordination of *wh*-*ph* is allowed in the following languages:

- Romanian (R) (Comorovski, 1989, 1996; Ratiu, 2010), Vlach (Merchant, 2008)
- Hungarian (H) (Lipták, 2001, 2003)

(6) **Ki és melyik napon** érkezett?  
who and which day-on arrived  
Who arrived and on which day?

- Slavic languages: Kazenin (2002), Chaves and Paperno (2007), and Gribanova (2009) on Russian, Skrabalova (2006) on Czech
- cross-linguistic analyses: Kliaschuk (2008); Citko and Gracanin-Yuksek (2010); Tomaszewicz (2011)

## Specificity of *wh*-ph

Unlike universal quantifiers (3) and negative words (4), *wh*-ph (5) have different properties depending on the presence or absence of the coordinator.

- ‘Paratactic’ *wh*: multiple preverbal *wh*-ph

(7) **Ki mikor** jött? (H)  
who whom saw

- **Coord-*wh***: coordinated preverbal *wh*-ph

(8) **Ki és mikor** jött? (H)  
who and when came

## 'Paratactic' *wh* vs. Coord-*wh*

These structures have very different properties:

- type of reading: 'Paratactic' *wh*-*ph* usually license only pair-list answers, whereas Coord-*wh* license both pair-list and single-pair readings, with a preference for single-pair readings
- syntax: unlike in Paratactic *wh*-*ph*, which obey strict ordering constraints, in Coord-*wh* the order of *wh*-*ph* is relatively free
- prosody: in Coord-*wh*, the first *wh*-*ph* can constitute an independent intonation unit, which is not the case with the initial *wh*-*ph* in Paratactic-*ph*

→ Coord-*wh* and 'Paratactic'-*wh* are not the variants of the same structure, but necessitate different analyses

## Multiple *wh*-ph and coordination

Apart from Coord-*wh*, in which all *wh*-ph are in initial position, we can find end-attachment coordination (henceforth End-Attach-*wh*), in which one of the *wh*-ph is 'stranded' at the end of the sentence:

- (9) **Ki** jött, és **mikor?** (H)  
who came, and when
- (10) **Cine** a venit, și **când?** (R)  
who has come, and when

# Aims

- comparison and analysis of the Hungarian and Romanian data (typologically unrelated languages), considering both Coord-*wh* and End-Attach-*wh* structures
- claim: no universal analysis for both structures and both languages: both Coord-*wh* and End-Attach-*wh* structures are *biclausal* in Romanian, containing *fragments*, whereas unlike the biclausal End-Attach-*wh* structures Coord-*wh* structures are *monoclausal* in Hungarian

## Acceptability judgements

There is considerable variation and hesitation in the acceptability of multiple questions among speakers, which renders the analysis particularly difficult. It is generally related to the argument/adjunct asymmetry, in particular to the syntactic function of the last *wh*-ph:

- the last *wh*-ph is an adjunct (see examples (11), (14)): no acceptability problems; the most frequently used in both Coord-*wh* and End-Attach-*wh*
- the last *wh*-ph is an argument (see examples (12)-(13), (15)-(16)): specific constraints in both languages

## Examples

- (11) {**Mikor** | **ki**} és **miért** (14) {**Unde** | **cine**} și **când**  
 {when | who} and why {where | who} and when  
 ment el? (H) va pleca? (R)  
 left PRT will go?
- (12) **Hol** és **mit** ettél? (15) **Unde** și **ce** ai  
 where and what ate.2sg where and what have.2SG  
 (H) mâncat? (R)  
 eaten
- (13) **Ki** és **mit** választott? (16) **Cine** și **ce** a  
 who and what chose who and what has  
 (H) cucerit? (R)  
 conquered

# Ordering Constraints in Romanian

Completeness principle: all combinations are possible provided that the base clause (indicated below in square brackets) containing the verbal predicate and the immediately preceding *wh*-ph has to be well-formed, even in the absence of the other *wh*-ph.

As Romanian (like Hungarian) is a pro-drop language, it allows the drop of some arguments. Verbal predicates that do not allow for null arguments render examples less acceptable.

## Examples with Coord-*wh*

- (17) a. **Cine** și [ce ți-a spus]?  
 who and what has said  
 b. **Ce** și [cine ți-a spus]?  
 what and who has said
- a'. **Ce** ți-a spus?  
 b'. **Cine** ți-a spus?
- (18) a. **Cine** și [unde locuiește]?  
 who and where lives  
 b. ??**Unde** și [cine locuiește]?  
 where and who lives
- a'. **Unde** locuiește?  
 b'. \***Cine** locuiește?

## Examples with End-Attach-*wh*

- (19) a. [**Ce** ai mâncat], și **unde**?  
 what have.2SG eaten, and where  
 b. [**Unde** ai mâncat], și **ce**?  
 where have.2SG eaten, and what
- (20) a. [**Pe cine** ai văzut], și **unde**?  
 whom have.2sg seen, and where  
 b. ??[**Unde** ai văzut], și **pe cine**?  
 where have.2SG seen, and whom

## Ordering constraints in Hungarian

*ki* (who) has to be the initial interrogative word, otherwise the order is free:

- (21) a. **Ki** és **mit** választott?  
 who and what chose
- b. \***Mit** és **ki** választott?
- (22) a. **Ki** és **miért** ment el?  
 who and why left PRT
- b. \***Miért** és **ki** ment el?
- (23) a. **Ki** és **hova** megy?  
 who and where goes
- b. \***Hova** és **ki** megy?

## No cataphoric dependency

In both languages, End-Attach-*wh* structures are infelicitous if the sentence-final *wh*-phrase is the subject:

(24) ??**Miért** hívott és **ki?** (H)  
 why called and who

(25) ??**Ce** a mâncat, și **cine?** (R)  
 what has eaten and who

Explanation: the first clause (pro-drop) presupposes the subject, thus the identity of the subject cannot be asked about in the second clause (see the 'counter-indefiniteness' effect in Kayne and Pollock (2001) and Drijkoningen and Kampers-Manhe (2001) for similar issues in subject-inversion contexts)

## Semantic restrictions

In both languages, Coord-*wh* structures are infelicitous, if the verbal predicate involves a *collective* or *reversible* semantic relation:

- (26) a. \***Ki** és **kivel** találkozott? (H)  
 who and who.INSTR met
- b. **Cine** (\*și) **cu cine** s-a întâlnit? (R)  
 who and with whom REFL-has met
- (27) a. \***Ki** és **kit** ütött meg először? (H)  
 who and whom hit PRT first
- b. **Cine** (\*și) **pe cine** a lovit mai întâi? (R)  
 who and whom has hit first

## Previous Analyses

- Monoclausal approaches (Kazenin, 2002; Lipták, 2001, 2003; Skrabalova, 2006; Griбанова, 2009): coordination of *wh*-ph fronted (by movement) to the left periphery of the same clause; parallelly to the analysis of Paratactic *wh* with the additional insertion of the coordinator after the *wh*-ph have been fronted ('spurious coordinator')

$$[CP [\&P wh_1 \text{ conj } wh_2] [TP t_1 \dots t_1] ]$$

- Biclausal approaches: coordination of clauses

$$[\&P [CP wh_1 [TP t_1 \dots ] ] \text{ conj } [CP wh_2 [TP \dots t_2 ] ]]$$

- Syntactic ellipsis (Bánréti, 2007; Giannakidou and Merchant, 1998; Camacho, 2003; Merchant, 2008; Tomaszewicz, 2011): standard clausal coordination accompanied by the ellipsis of all the material except for the *wh*-ph itself in one of the conjuncts (like sluicing)
- Multidominance/Sharing (Citko and Gračanin-Yuksek, 2010; Ratiu, 2010; Gračanin-Yuksek, 2007)

# Romanian: mono- or biclausal?

Claim: both Coord-*wh* and End-attach-*wh* are biclausal structures in Romanian

## Evidence for biclausality I

- distribution of the interrogative particle *oare* (Ratiu, 2010), which usually only appears once per clause

- (28)
- Oare **cine** (\*oare) **ce** va spune?  
PRT who (PRT) what will say
  - Oare **cine** și (oare) **ce** va spune?  
PRT who and (PRT) what will say
  - Oare **cine** va veni, și (oare) **când**?  
PRT who will come, and (PRT) when

## Evidence for biclausality II

- coordination of yes/no question markers and *wh*-ph (the second question has to presuppose that the first is already resolved)

(29) RATB și Metrorex vor anunța vineri **dacă** și **când**  
 RATB and Metrorex will announce Friday if and when  
 intră în grevă generală.  
 enter in strike general

- insertion of sentence-level adverbials between the *wh*-ph

(30) Nu văd **cum** și, mai important, **cine** ar putea să-l dea jos  
 not see how and, most importantly, who could overthrow  
 pe Băsescu.  
 Băsescu

## Evidence for biclausality III

- presence of the clausal coordinator *iar* (reserved for contrastive clausal coordination)

(31) Vreau să știu mai întâi **cine**, iar apoi **ce** a făcut.  
want to know first who, and then what has done

## Problems with syntactic ellipsis

In the biclausal analyses involving syntactic reconstruction, the elided constituent is structurally represented and interpreted; ellipsis in one conjunct is possible under identity with the second conjunct.

However, the verb supposedly undergoing ellipsis cannot always be reconstructed, for instance because one of its arguments would be missing:

- (32) a. Polițistul satului îi cunoaște pe toți;  
 policeman-the of the village knows PRT.ACC everyone;  
 știe **cine** (\*locuiește) și **unde** locuiește.  
 knows who (lives) and where (lives)
- b. **Cine** (\*ocupă pentru tine) și **ce loc** ocupă  
 who (occupies for you) and which place occupies  
 pentru tine?  
 for you

## Proposal

A biclausal analysis in a 'what you see is what you get' manner. The first *wh*-ph(s) in Coord-*wh* (33-a) and the 'stranded' *wh*-ph in End-Attach-*wh* (33-b) are *fragments* attached to some 'complete' clause.

- (33) a. [**Unde**] și [ce a mâncat]?  
 where and what has eaten
- b. [Ce a mâncat] și [**unde**?]  
 what has eaten and where

Fragments (cf. Ginzburg and Sag (2000)) are expressions whose semantic contribution is only partially given by their form. They receive a clausal interpretation without having the internal structure of an ordinary clause.

# Fragments

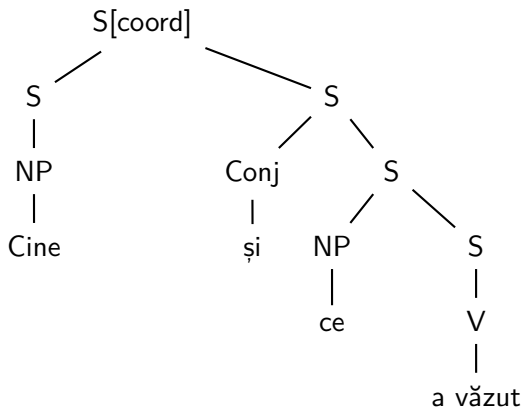
Their semantic contribution is a function of:

- the type of the fragment (i.e. a short question)
- contextual information (gained from the source clause)
- the literal content of the fragment

→ as a whole, it has a similar content to that of the source clause (e.g. the interpretation of the fragment *unde* (where) in (34) is *Unde a mâncat* (where has eaten))

(34) [Unde] și [ce a mâncat]?  
where and what has eaten

## Simplified tree for Romanian Coord-*wh*



# Hungarian: mono- or biclausal?

Claim: Coord-*wh* structures are monoclausal, whereas End-attach-*wh* structures are biclausal in Hungarian  
→ the *fragment*-analysis is applicable to the latter only

## Evidence for monoclausality of Coord-*wh* I

- repetition of interrogative particle *vajon* ungrammatical in Coord-*wh*, but not in End-Attach-*wh*:

- (35) a. Vajon **ki** és (\*vajon) **mikor** érkezett?  
 PRT who and (PRT) when arrived
- b. Vajon **ki** érkezett és (vajon) **mikor**?  
 PRT who arrived and PRT when

## Evidence for monoclausality of Coord-*wh* II

- no sentence-level adverbials in the Coord-*wh* (only in a prosodically marked sentence, where the adverb and the second interrogative word are parenthetical)

- (36) a. \***Ki** és még fontosabb **mikor** jött be ide?  
 who and even more important when came in here  
 b. **Ki** – és még fontosabb: **MIKOR** – jött be ide?

- some auxiliaries can appear between the *wh*-ph (the auxiliary and the main verb have to be clausemates)

- (37) **Mit** akarunk és **hol** vacsorázni?  
 what want.3SG and where eat for dinner  
 What do we want to eat for dinner and where?

## Evidence for monoclausality of Coord-*wh* III/a

### Definite and indefinite conjugation

Transitive verbs in Hungarian must agree with the definiteness of their object and appear in the definite conjugation (opposed to the verb form in all other cases):

- (38) a. Olvas**ok** egy könyvet.  
 read.1SG.INDEF a book.ACC
- b. Olvas**om** a könyvet.  
 read.1SG.DEF the book.ACC

The interrogative word *mit* (what) is followed by indefinite conjugation (the object is asked about and not yet identified).

- (39) Mit olvas**ol**?  
 what read.2SG.INDEF

## Evidence for monoclausality of Coord-*wh* III/b

Coord-*wh* (see Lipták (2001)):

- (40) **Mit** és **hogyan** készítesz/\*készítéd?  
 what and how prepare.2SG.INDEF/prepare2SG.DEF  
 What are you preparing and how?
- (41) **Mit** készítesz és **hogyan** (készítéd)?  
 what prepare.2SG.INDEF and how (prepare.2SG.DEF)  
 What are you preparing and how are you preparing it?

→ Coord-*wh*: *mit* cannot be in a separate clause, since it would have to allow the definite conjugation on the verb in (40)

→ End-attach-*wh*: the question in the first clause already resolved, this is why the conjugation in the second clause is definite

→ End-attach-*wh* is biclausal, whereas Coord-*wh* monoclausal

## Proposal

- Coord-*wh* involve monoclausal structures in Hungarian: the *wh*-ph are in one and the same clause but they must have the same function
- common function = focus? (Lipták, 2001; Skrabalova, 2006); non-interrogative foci cannot always be coordinated

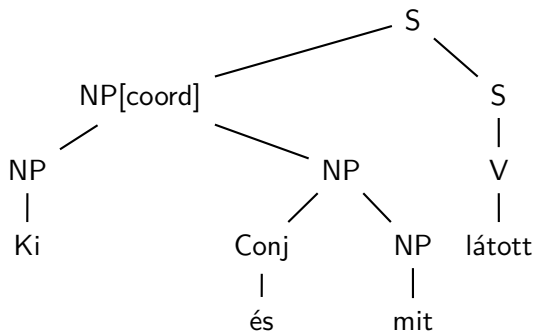
(42) \*JÁNOS és TEGNAP ment moziba.  
 János and yesterday went cinema.ILL  
 \*JOHN and YESTERDAY went to the cinema.

- common grammatical function: *extracted*

Extraction constructions always comprise a filler and a gap. A filler is an overt constituent in a non-argument position (on the left periphery of the clause) which is associated with (or fills) a gap in its canonical position.

*Wh*-ph in Coord-*wh* in Hungarian are both fillers, which constitute the basis of their coordination.

## Simplified tree for Hungarian Coord-*wh*



# Conclusion

- both monoclausal and biclausal structures are conceivable
- there is no unique universal structure for conjoined *wh*-questions; their structure can vary not only cross-linguistically, but also within a single language.
- no hybrid *wh*-coordination in Hungarian and Romanian: in Hungarian Coord-*wh* share the *filler* function, whereas in Romanian Coord-*wh* and End-Attach-*wh* and Hungarian End-Attach-*wh* two clauses are coordinated, a full one with a fragmentary one

# References I

- Zoltán Bánréti. **A mellérendelés és az ellipszis nyelvtana a magyarban.** [The Grammar of Coordination and Ellipsis in Hungarian]. Tinta könyvkiadó, Budapest, 2007.
- José Camacho. **The Structure of Coordination: Conjunction and Agreement Phenomena in Spanish and Other Languages**, volume 57 of **Studies in Natural Language and Linguistic Theory**. Kluwer Academic Publishers, 2003.
- Rui Pedro Chaves and Denis Paperno. On the Russian Hybrid Coordination Construction. In **Proceedings of the 14<sup>th</sup> International Conference on HPSG**, 2007.
- Barbara Citko and Martina Gracanin-Yuksek. Towards a new typology of coordinated wh-questions. MS, 2010.
- Ileana Comorovski. **Discourse and Syntax of Multiple Constituent Questions**. PhD thesis, Cornell University, 1989.

## References II

- Ileana Comorovski. **Interrogative Phrases and the Syntax-Semantics Interface**. Kluwer Academic Publishers, Dordrecht, Boston, London, 1996.
- Frank Drijkoningen and Brigitte Kampers-Manhe. On the interpretation of postverbal subject positions. **Utrecht Studies in Romance Linguistics**, 21, 2001.
- Anastasia Giannakidou and Jason Merchant. Reverse sluicing in English and Greek. **The Linguistic Review**, 15:233–256., 1998.
- Jonathan Ginzburg and Ivan Sag. **Interrogative Investigations. The Form, Meaning and Use of English Interrogatives**. CSLI, Stanford, 2000.
- Martina Gračanin-Yuksek. **About Sharing**. PhD thesis, MIT, Mass., 2007.
- Vera Griбанова. Structural adjacency and the typology of interrogative interpretations. **Linguistic Inquiry**, 40:133–154., 2009.
- Richard S. Kayne and Jean-Yves Pollock. New thoughts on stylistic inversion. In Aafke Hulk and Jean-Yves Pollock, editors, **Subject Inversion in Romance and the Theory of Universal Grammar**, pages 595–621. Oxford University Press, Oxford, 2001.

## References III

Konstantin I. Kazenin. On Coordination of Wh-Phrases in Russian. unpublished manuscript, Universität Tübingen, 2002.

M Kliaschuk. L'interrogation coordonnée dans les langues slaves. In **Proceedings of the 2007 annual conference of the Canadian Linguistic Association**, 2008.

Anikó Lipták. **On the Syntax of Wh-items in Hungarian**. PhD thesis, Utrecht University, 2001.

Anikó Lipták. Conjoined questions in hungarian. In Cedric Boeckx and Kleanthes K. Grohmann, editors, **Multiple Wh-Fronting**, volume 64 of **Linguistik Aktuell/Linguistics Today**, pages 141–160. John Benjamins Publishing Company, Amsterdam/Philadelphia, 2003.

Jason Merchant. Spurious coordination in Vlach multiple wh-questions. in progress, 2008.

## References IV

- François Mouret. **Grammaire des constructions coordonnées. Coordinations simples et coordinations à redoublement en français contemporain.** PhD thesis, Université Paris Diderot-Paris 7, UFR de Linguistique, École Doctorale de Sciences du Langage, LLF, Paris, February 2007.
- Dafina Ratiu. A multidominance approach to conjoined questions in romanian. BWPL Handout, 2010.
- Ivan Sag, Gerald Gazdar, and Thomas Wasow and Steven Weisler. Coordination and how to distinguish categories. **Natural Language and Linguistic Theory**, 3.(2.):117–171., 1985.
- Hana Skrabalova. Parataxe apparente et coordination des interrogatifs en tchèqe. **Faits de langue**, 28, 2006.
- Barbara Tomaszewicz. Against Spurious Coordination in Multiple Wh-questions. In M. B. Wasburn, editor, **Proceedings of the 28<sup>th</sup> West Coast Conference on Formal Linguistics**, pages 186–195. Cascadilla Proceedings Project, 2011.